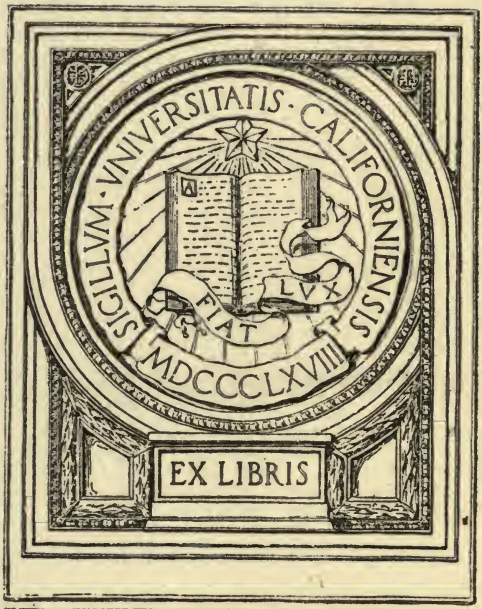
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A History of Modern Banks of Issue

BY

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FIFTH EDITION

REVISED AND ENLARGED WITH NEW CHAPTERS ON THE FEDERAL RESERVE ACT AND THE BANKS IN THE EUROPEAN WAR

G. P. PUTNAM'S SONS
NEW YORK AND LONDON
The Knickerbocker Press
1915

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1915

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The Knickerbocker Press, New York

To
MY MOTHER

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PREFACE TO THE FOURTH EDITION.

THE declaration made in the first edition of this work, published in 1896, that financial and economic subjects promised to be "the paramount issues of American politics for many years to come," has been verified by events. While the United States have taken some long steps in the direction of a sound monetary system, the question of a proper banking currency still remains unsettled and is at this moment under investigation by a special commission authorized by Congress. It seems proper, therefore, that a summary of the experience of the world in banking should be presented to the public which includes the events of the past twelve years as well as those of earlier times. The fact stated in the preface to the first edition, that there is no work in English covering exactly the ground covered by *Modern Banks of Issue*, has remained substantially true. One larger and more elaborate work, written by different authors, and a few bald summaries of facts and statistics have been published, but, apart from these, there is no other volume which brings together in connected and accessible form the record of the banking experiences of the world.

Important events have taken place in both banking and political history during the past twelve years. The United States have become competitors for the commercial empire of the Orient to a degree which has justified much more extended accounts than were given before of banking and currency conditions in Oriental countries. The note-issuing systems of Switzerland, Sweden, and Mexico have been completely reconstructed, and important changes have been

made in Russia, Austria-Hungary, Japan, and other countries. In this new edition of *Modern Banks of Issue*, not only have such events been brought down to date, but more attention has been given than in the first edition to several phases of banking development, notably on the side of discount policy and on that of the division of profits between the bank and the state. In practically every European state, even where there has been no radical change in monetary and banking policy, the opportunity which has arisen to revise the charters of the banks has been availed of, in the case of the great central banks, to narrow the privileges and profits which were originally granted to the shareholders. The facts in this regard are presented in this edition with much greater approach to completeness than in the earlier editions of this work.

The past twelve years have contributed much to strictly monetary as well as to banking history. Questions whose solution was doubtful and disputed have been settled to the satisfaction of intelligent men. The gold standard, which was described twelve years ago as "a conspiracy against the human race," has been adopted in succession within that time by the United States, Russia, Austria-Hungary, Japan, and Mexico. Practically the only country remaining upon the silver standard is China, which is without a national monetary system, and even as these pages go to press despatches from China indicate that the government is planning such a national system to be based ultimately upon gold.

This history of banking is not intended as a treatise on coinage, except so far as changes in coinage laws have been accomplished through banking agencies and have affected banking history. The great banks of the world have inevitably, however, been powerful factors in the monetary changes which have been accomplished in recent years. Especially has this been the case where the new monetary systems have depended in some degree, as in the case of British India, the Philippines, Mexico, Russia, and Austria-Hungary, upon the control of the market for exchange. In

this field experience has developed what is practically a new monetary system and has established new principles to govern the issue and distribution of money. The gold exchange system, inaugurated with halting steps in British India in 1893, has been adopted with various modifications in other countries and has stood unshaken the test of a crisis in the world's markets and a local crisis in production in India. Those events it has seemed the legitimate function of this work to set forth.

Owing to the importance of the events of the past dozen years, and the increased space given to the banking systems of Mexico and the Orient, it has seemed advisable to confine the scope of this work to narration. To this end there have been eliminated the three chapters on banking theory which appeared in the earlier editions: "The Theory of a Banking Currency," "Crises and Their Causes," and "The Advantages of a Banking Currency." A more nearly complete and satisfactory presentation of the author's views on monetary and banking theory will be found in the separate work in two volumes on *The Principles of Money and Banking*, published in 1905, and issued on the continent of Europe in the French translation of Dr. Raphaël Georges-Lévy.

In sending forth this work again to the public in a condition abreast with recent monetary history, the author can only renew the hope that it will contribute in some degree to the diffusion of those sound views of banking whose adoption into law is essential to the economic progress of our country.

CHARLES A. CONANT.

NEW YORK, *February* 1, 1909.

PREFACE TO THE FIFTH EDITION.

EIGHTEEN years have elapsed since the publication of the first edition of *A History of Modern Banks of Issue*. They have been years of remarkable progress in monetary science. The United States, which for a long time lagged behind other advanced commercial countries in the development of her monetary system, has finally adopted a comprehensive measure of centralized banking and note issue, which, if wisely administered, will put her bankers in a position to compete on something like an equal plane with bankers of other countries, and which will afford the means of guarding her gold stock and removing forever the menace of such humiliating conditions of monetary inefficiency as were developed in the crisis of 1907.

So important is this step in the progress of American finance, that a new chapter has been added to this work in this fifth edition, outlining the scope and effects of the Federal Reserve Act of December 23, 1913, by which a system of centralized banking has been established. The long process of evolution in American banking education, beginning just before the appearance of the first edition of *A History of Modern Banks of Issue*, in 1896, has not been ignored. The provisions of the emergency act of May 30, 1908, known as the Aldrich–Vreeland Law, are set forth under the history of the national banking system, and an analysis is made of the plan of the National Monetary Commission, many of whose provisions were adopted in the Federal Reserve Act.

In several of the principal foreign countries, revisions of

the national bank charters have occurred during the past few years, which have emphasized the growing tendency to more rigid government control over finance and a larger participation of the state in the profits of note issue. These changes in the charters of the banks of France, Germany, and Austria-Hungary, which have been made since the appearance of the fourth edition of this work, are set forth, and the statistics for these countries have been brought up to date.

Changes in the banking law of our Canadian neighbors, the adoption of a stable monetary system in Nicaragua, and the revision of the currency system of British India are set forth as fully as space permits. In this edition, it has not been attempted to make all the minor corrections in statistics which might be called for by the lapse of five years since the appearance of the fourth edition; but the effort has been made to set forth important changes of law and policy and serious interruptions to the normal functioning of the monetary system such as has occurred in Mexico.

The remarkable series of events arising from the war in Europe, which seemed for a moment likely to shake the modern structure of credit to its foundations, occurred when the new edition of this book was nearly ready for the press; and its publication was delayed in order that a chapter might be added on "The Banks in the European War." The war has been productive of many striking lessons in the field of monetary history and none more striking than the success of the system of central banking in sustaining the entire fabric of money and credit under conditions of strain never before encountered in the history of the world. The story of this test and its application to American experience, it is the aim of the new chapter to set forth.

CHARLES A. CONANT.

NEW YORK, *January* 15, 1915.

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HISTORY OF MODERN BANKS OF ISSUE.

CHAPTER I.

THE BEGINNINGS OF BANKING.

Credit Instruments not a Modern Invention—Early Forms of Banking in Assyria, Greece, and Rome—The Baked Clay Tablets of Babylonia—Survival of Banking Methods at Constantinople—Origin of the Word "Bank"—Beginnings of the Bank of Venice—The Tax Farmers and Financiers of the Middle Ages—The Prohibition of Loans at Interest and the Functions of the Jews.

THE mechanism of credit dates back to the civilizations of antiquity. It was much more fully developed in Assyria and Babylon than in early Greece and Rome, and after its development in the latter countries during their periods of military and commercial ascendancy suffered a new eclipse during the interruption of communications in the Dark Ages. It was left, however, for the sixteenth century of our era to develop the bank note in something like its modern form, and for the nineteenth century to spread its use over the civilized world.

Assyria, as early as the seventh and even the ninth century before Christ, possessed a system of commercial instruments, which included promissory notes, bills of exchange, and transfer checks, not unlike the modern bank check. As this system was in operation before the use of coined money, these documents usually stipulated for the payment of a

given weight of silver or copper.[1] They were inscribed, not on paper, but on small clay tablets about the size of a piece of toilet soap. After the contract had been written in the soft earth, it was baked so as to render it unalterable and indestructible. Such a form of document naturally could not be subjected to endorsement or acceptance, like modern commercial paper; but this defect was supplied by the presence of witnesses, usually having a religious or legal authority.[2] The original was placed for safety in either the temple or the record chamber of the city, enclosed in a clay envelope or case, while copies went to one or both the contracting parties. Many of these documents, preserved in the British Museum, are records of deeds and the partition of real estate, but some involve loans of silver at interest, and these become numerous in the reigns of Nebuchadnezzar and Nabopolassar (625–604 B. C.).[3]

While the Athenians and Romans were in some respects less advanced in the mechanism of credit than the Eastern peoples, their surviving records are more complete. The first of the Greek bankers referred to in history is Philostephanos, who had the honor of receiving into his custody at Corinth a deposit of seventy talents from the hands of Themistokles. The bankers of Athens were among the most powerful in Greece, and the son of the banker Pasion was able to boast that he could borrow where he would, at Lampsakos, at Phasos, at Tenedos, or elsewhere, because he was the son of Pasion. The first Athenian bankers, however, were not citizens, but freedmen of Corinthian and Ionian bankers who had shown skill and acquired wealth at Athens as the agents of their employers. Wealth did not throw down social barriers for them until evidence of their patriotism was afforded by loans at low rates to the state

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[1] *Vide* forms of these contracts in Lenormant, *La Monnaie dans l' Antiquité*, I., 114–117.

[2] Lenormant, I., 118.

[3] *British Museum: Babylonian and Assyrian Antiquities*, 1900, 174–176.

in the hour of need. The banking business was mingled with large speculations in foreign trade and confused with the function of merchants, until the growth of wealth and the subdivision of industries gradually erected it into a distinctive profession.[1] Many of the stronger Athenian bankers attained a high degree of prosperity and their houses endured for several generations.

One of the first forms of banking was the exchange of foreign monies for domestic monies and the return of the foreign monies to the country of origin. The narrow limits of the Greek and Italian states made the function of the money-changer essential in international trade, and afforded large opportunities for profit. There were many prejudices against making trade too easy by a uniform standard, and the money of domestic use was often different from that employed in foreign commerce.[2] Xenophon declared that the larger number of the cities of Greece had money having value only at home, and that traders at such places were compelled in consequence to make exchanges in merchandise, but that Athens was an exception and that her silver drachmas were accepted everywhere.

The bankers in Athens were known as τραπεζίται and those in Rome as *argentarii* (dealers in silver).[3] The banking business was subjected to official regulation in both Athens and Rome. The Roman laws required the *argentarii* to produce their accounts for official inspection, and prescribed that they should keep a cash-book, a deposit-book, and a day-book. The transfer of credits was permitted at Athens by the law of Solon, and commercial paper from Phœnicia and Egypt was negotiated upon the Athenian

[1] Cruchon, 22.

[2] *Vide* Favre, *La Genèse de l'Argent*, in *Revue d'Économie Politique*, April, 1899, XIII., 358.

[3] Cruchon enumerates more than sixty titles of different classes of persons dealing with monetary matters at Rome. Some of these were public officials, and the exact character of the business done changed from time to time, even where old names were retained.—*Les Banques dans l'Antiquité*, 35.

market. The fact that bankers conducted the exchange of money of all countries naturally made them authorities in monetary matters. At Athens they kept accounts for their clients, which they were compelled to produce upon requisition, and their accuracy and technical knowledge led to their frequent employment for verifying the accounts of the city.

The Greeks taught banking to Rome, and the first names for bankers there were of Greek origin. The banking business at Rome was at first largely in the hands of foreigners and freedmen, but certain branches of finance were in the hands of native Romans. It was the usurious rates of interest exacted by the patricians in their business relations with the plebeians, rather than any acts of regular bankers, which led to the secession of the plebs to the Sacred Mountain in 494 and to the Janiculum in 278 B.C.[1] The regular bankers, the *argentarii*, were charged with the organization of the coinage by Marius Gratidianus in the first century B.C., and the work was so well done that statues were raised to the prætor who had taken the initiative in the reform. Sylla overturned the statues and put in circulation the filled money of base metal which was one of the devices of early times.[2] The booths of the bankers in the Forum were so conspicuous that when, in 309 B.C., the bucklers of the Samnites were brought home by the victorious Roman armies, they were ordered to be displayed with their incrustations of gold and silver above these booths in order that the people might view their splendor.[3] In spite of these honors, however, it was not a source of pride in Roman patrician society to be descended from the *argentarii*. Marc Antony made it a subject of derision that Augustus counted an *argentarius* among his paternal ancestors and that even on his mother's side an *argentarius* was his grandfather.[4]

The concentration at Rome of the control of the politics and business of the world gradually extended the scope of

[1] Cruchon, 40.

[2] Deloume, *Les Manieurs d'Argent à Rome*, 156.

[3] Cruchon, 43.

[4] *Ibid.*, 54.

Roman banking, subdivided the business, and resulted in the creation of a complete body of jurisprudence, which was embodied in the Institutes of Justinian. The *argentarii* were first money-changers, then receivers of deposits, then lenders at interest both of their own money and that entrusted to them, and purchasers of bills of exchange. Deposits were utilized as the basis of transfers by paper credit, and loans were made by these instruments without the direct withdrawal of cash from the hands of the bankers. The first mention of the *argentarii* is in Livy, about 350 B.C., but the later Roman plays are full of references to their methods. *Prescribere* or *rescribere* was to give a check on one's account or transfer credit from one account to another. Thus Demipho says, in the *Phormio* of Terence, "But, Phormio, pray go over to the Forum and order that money be put to my account."[1] These transfer orders lacked the character of modern checks in not being transferable to order, but the principle of compensation, by setting off one debt against another between the same persons, was generally recognized.

The publicans or tax-farmers were the strongest organized financial body of antiquity. They not only farmed the taxes, but undertook to provide transportation and equipment for the armies and the means for great public works.[2] Some of the first publicans were men who combined the business of private trade with usury and money-changing and followed it in the wake of the Roman armies in their victorious progress over Northern Europe. Their exactions, supported by Roman power, made them very unpopular, and one of the notable incidents of the Gallic insurrection in Cæsar's time was the massacre of these merchants or *negotiatores* at Genabum.[3] The Italian merchants were also singled out, along with the publicans and proconsuls, as the special objects of the fury of the people of Pontus under Mithridates,

[1] *Sed transi sodes ad forum, atque illud mihi argentum rursum jube rescribi, Phormio.*—This is the rendering of Prof. MacLeod, *Theory and Practice of Banking*, I., 162.

[2] Deloume, 94.

[3] Cæsar, *De Bello Gallico*, VII., iii.

when fifty thousand Romans were massacred. The publicans formed powerful associations and held a position in Roman society similar to that held in the pre-Revolutionary period in France by the financiers. The commanders of the Roman armies and proconsuls also engaged in a form of banking by loaning their capital at usurious rates in the provinces. Brutus placed his capital in Kypros at 48 per cent., Verres placed his in Sicily at 24 per cent., while even Cato watched carefully over his investments, and Pompey loaned hundreds of millions of sesterces to the kings and cities of Greece and Asia.[1]

It is the opinion of Jannet that the organization of the greater commerce and of banking as it existed in the Roman Empire survived the invasions of the barbarians and persisted during the first part of the Middle Ages.[2] But lack of security for property in Western Europe, and the neglect of the highways of commerce, gradually drove both commerce and credit within narrower limits and led to the withdrawal of metallic money for hoarding from its legitimate use in circulation. The revival of banking in the later Middle Ages came through the money-changers. The growth of commerce and the accumulation of capital as early as the eleventh century began to draw the precious metals from their hiding-places and led each seigneur to coin his own money. The diversity of weights and the varying market ratio between gold and silver made the function of the exchanger an important one, and the old cathedral windows at Bourges, Le Mans, and elsewhere still portray his booths, behind which he is represented with a balance weighing the coins piled at his feet or drawing from a sack those which he proposes to give in exchange.[3] The edicts of Leo the Wise, the Byzantine Emperor of Constantinople, contained a series of provisions governing the money-changers. They were constituted into a corporation, into which admission

[1] Deloume, 146.
[2] *Le Crédit Populaire et les Banques en Italie*, 7, n.
[3] Cons, *Précis d'Histoire du Commerce*, I., 196.

could be obtained only upon the testimony of reputable citizens that the candidate would not debase or counterfeit the coins and that he would be in the market-place at proper times by himself or a substitute for the purpose of meeting his obligations.

Similar money-changers existed in the Arabian cities. In Italy, when Venice, Florence, Naples, Genoa, and Pisa became great commercial centres, the Lombards became the bankers and waged a bitter rivalry with the Jews. The Italian bankers were useful to the church, in transmitting to Rome contributions collected in Germany, France, and England, and in several countries were given special protection as the representatives of the Pope. General regulations of the exchange and banking business appear early in the Italian statutes. The exchangers of Lucca in 1111 were required to take an oath not to steal, commit fraud, or falsify. Those engaged in the business were known in Italy as *campsores*, or dealers in foreign money. The chiefs of the Lombard League obtained from Frederic Barbarossa pledges that the customs connected with the tables of the exchangers should be respected. In the organization of industry at Florence in 1266 the "art of exchange" was one of the seven higher arts, constituting one of the bourgeois corporations and ranking above the fourteen made up of laborers.[1] Even before this date the art of exchange had been recognized in 1204 in a treaty concluded between Florence and Sienna.

The Jewish and Italian bankers spread their connections throughout Western Europe, and the Lombards shared with the Jews the unpopularity of their profession. The inhabitants of Asti in Lombardy pushed the trade in money beyond the Alps in 1226. Louis IX. in 1256 ordered 150 Asti money-changers to be thrown into prison and the money which they had loaned in France confiscated. Twelve years later they were banished by the same monarch and allowed only three months in which to collect their debts.[2]

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[1] Nys, *Recherches sur l'Histoire de l'Économie Politique*, 155.

[2] Roscher, *Principles of Political Economy*, II., 119.

The Florentines and Venetians, who succeeded the Lombards, did much to reorganize credit and formed great houses with branches directed by the co-partners. The Medici in the fifteenth century had not less than sixteen branch houses in the principal commercial cities.[1] When Holland became a centre of capital and enterprise, Amsterdam superseded Antwerp in commercial influence, and the available capital of the world was attracted there by the excellent organization of the Bank of Amsterdam. The Jewish colony included Jews from Portugal, Spain, Italy, and Germany. At Hamburg the Jewish community, formed from Portuguese refugees, was credited with a considerable share in the creation of the public bank.[2]

The word "bank" is derived from the public loans made by the Italian cities rather than to the business of banking as understood in later times. The usual Italian name of a public loan was *monte*, signifying a joint-stock fund. The Germans were influential in Italy during the Middle Ages, especially about the time when a forced loan of one per cent. was levied by the city of Venice in 1171 upon the property of all citizens. Their name for a joint-stock fund was *banck*, meaning a heap or mound, which the Italians converted into *banco* and employed for an accumulation of either stock or money. The definition of a bank given in an Italian dictionary in 1659 was "Monte, a standing Bank, or Mount, of money, as they have in divers cities in Italy." A more recent writer, Cibrario, says: "Regarding the Theory of Credit, which I have said was invented by the Italian cities, it is known that the first Bank, or public debt (*il Prio Banco o Debito Pubblico*), was erected in Venice in 1171."[3] The word was adopted into English, meaning indifferently public loans

[1] Jannet, *Le Crédit Populaire et les Banques en Italie*, 6.

[2] Jannet, *Le Capital au XIXe Siècle*, 434.

[3] MacLeod, *Theory of Credit*, II., 578. Professor MacLeod insists that the common derivation of the word "bank" from the counter upon which the money-changers kept their money, is without foundation. He says: "The Italian money-changers, as such, were never called *Banchieri* in the Middle Ages."

or stocks of money. Benbrigge, in 1646, speaks of the "three Bankes" at Venice, meaning the three public loans or *Monti*. The issue of paper money directly by the state was spoken of as "raising a Banke" in colonial days in Massachusetts, the word "bank" standing for the money rather than the institution which put it in circulation.[1]

The banks of Venice have attracted wide attention because of the long-preserved legend, that a public bank issuing negotiable securities used as money was created there in 1171. This legend has been proved unfounded by recent investigations of Lattes and Ferrara.[2] Banking in Venice was entirely in private hands during the early centuries and was a subject of legal regulation from time to time between 1270 and 1584. It was not until the latter year that an attempt was made to create a public bank. Private banking acquired a wide scope as the gradual outgrowth of the business of the *campsores*. The latter were required as early as 1270 to give security to the government as the condition of carrying on their traffic. Tommaso Contarini, in a speech delivered in the Senate in 1584 in favor of establishing a public bank, declared that there had been one hundred and three banks, of which ninety-six had come to a bad end and only seven had succeeded. Yet, says Professor Dunbar, "notwithstanding a train of disasters nearly two centuries and a half long, the service rendered by the banks to commerce had been such, on the whole, as to lead Contarini to

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Weeden, *Economic and Social History of New England*, 318.

[2] The results of their inquiries were printed by Professor Lattes in *La Libertà delle Banche a Venezia dal Secolo XIII. al XVII.*, published at Milan in 1869, and by Professor Ferrara in the *Nuova Antologia* for January and February, 1871. They have been carefully analyzed and summed up by Professor Dunbar, *Economic Essays*, 143–167. The true status of the Venetian banks seems to have been known to Blanqui, for he says that "what we know of the Bank of Venice and that of Genoa does not permit a doubt that these banks were nothing else than great tax-farming enterprises (*grandes régies de perception*) for the objects of the Government."—*Histoire de l' Économie Politique*, II., 41.

argue that to preserve the trade of the city without banking was not only difficult, but impossible."

These early banks first did business with their own money and then with deposits, like the London goldsmiths at a later date. The use of the deposits was not at first intended to economize cash, but simply to avoid its frequent handling. The transfer of credits upon the books of the bank transferred the title to cash in the custody of the bank, and, so far as this rule had been violated by grants of credit to persons who had not deposited cash, it was treated by Contarini as a grave abuse. He saw in the banking system only a method of transfer by book accounts, by which "buyer and seller are satisfied in a moment, while the pen moves over the page, whereas a day would not be enough to complete the contract for a great mass of merchandise by counting a great number of coins."[1] Notwithstanding the attempt to keep banking within these limits, the bankers employed the money entrusted to them in more or less speculative ways, and an act of 1374 forbade dealings in certain specified commodities or the opening of credits for such dealings. The banks came by degrees to make advances to the state and to grant credits to merchants and traders without full cash security. They thus became substantially banks of issue. They did not formally issue notes, but banking credits came to constitute certificates of deposit which circulated as currency.

The creation of the Bank of St. George at Genoa and the bank at Milan were due in some degree to the survival of the Roman system of farming the taxes. A single individual was hardly equipped with sufficient capital to carry on the large operations involved, and associations were formed for dealing with the state on the one hand and the taxpayer on the other, which became the nucleus of larger banking operations. Thus great financiers grew up, who dominated the politics as well as the finance of European states as soon as centralization had reached a point which called for a paid

[1] Dunbar, *Quarterly Journal of Economics*, April, 1892, VI., 314.

military force and made money the nerve of war. One of the great houses which wielded a remarkable influence in the fifteenth and sixteenth centuries was that of the Fuggers. The founder, Hans Fugger, came to Augsbourg from a country village in 1367 and died in 1409, leaving a fortune of 3000 florins. It was Jacob Fugger, his grandson, who gave the house a national character and international power. The business of trade in silks and other stuffs was at first mingled with mining and banking operations. It was in 1487 that Jacob Fugger concluded an arrangement with Duke Sigismund, by which he acquired the rich silver mines of the Tyrol as the guarantee of a loan. Maximilian, the successor of Sigismund, obtained large loans from the Fuggers, they had important transactions with Pope Julius II., and their operations were extended to Antwerp and India.

The election of the Roman Emperor after the death of Maximilian afforded the opportunity to dictate world politics. Francis I. of France had already announced that he would obtain the Empire at any cost, and it was necessary for Charles V. to appeal to the Fuggers for money to influence the electors. The aggregate cost of the election of Charles was stated at 850,000 florins, of which the Fuggers provided 543,000.[1] Charles V. endeavored to have the debt assumed by Spain and had such trouble in raising funds that Francis I. was able to win from him his German mercenaries. The Fuggers had great difficulty in recovering their advances to the Spanish king and in 1524 assumed the farming of a large part of the Spanish land taxes and the mines. Jacob Fugger was at this time the most potent financier in the world, with establishments in Poland, Hungary, Spain, Antwerp, and Naples. After his day, the prestige of the house gradually declined. As late as 1560 a "Fugger bill of exchange" was synonymous with cash, but in 1562 it was necessary to borrow to meet obligations and the assets of the house only slightly exceeded its liabilities. The King of Spain in

[1] *L'Époque des Fugger*, in *Annales de l' Institutes Sciences Sociales*, III., 108.

1631 accorded the Fuggers an extension for paying their debts and their affairs thereafter consisted of a process of liquidation.

The business of banking was only a branch of the great affairs of these finance houses of the sixteenth and seventeenth centuries. The Fuggers endeavored to acquire large territories in Chile, and the Welsers of Augsbourg under Charles V. obtained an entire province of Venezuela. The bankers of Genoa advanced to the kings of Spain the amounts required for their destructive wars in Italy, France, and the Netherlands, upon the guarantee of the product of the mines of the new world.[1] The Hochstetters of Amsterdam were among the greatest of the Dutch houses and it was declared by a chronicler that "princes, counts, nobles, tradesmen, peasants, valets, and servants have placed with Ambrose Hochstetter all their money, for which he pays five per cent." The Hochstetters endeavored between 1511 and 1517 to "corner" the tin market. They bought up the entire visible supply, but new mines were opened in Spain and Hungary which they were unable to control, and they lost a third of their investment. The house became involved in further difficulties within another generation and accused the Greshams of England of overthrowing their credit.[2]

Banking in France before the experiments of John Law was largely in the hands of the farmers-general and "financiers." The farmers-general have often been confounded with the other class, but they were for the most part respectable officials upon fixed salaries, who were connected with the financiers only through dealings with them and the efforts of the financiers to obtain admission to the official body as a badge of respectability.[3] The *Ferme Générale* was given a permanent organization only in 1680. The financiers were the adventurers and kings of finance, but lacked social prestige and were the subjects of many jibes for efforts

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[1] Nys, 164.

[2] *Annales de l'Institut des Sciences Sociales*, III., 365.

[3] Gomel, *Causes Financières de la Revolution*, I., 317.

—often successful—to ally themselves with noble families. Before the Revolution many of the great estates had passed into their hands.[1] They were known under the specific names of *partisans* and *traitants*, the first name referring to the fact that they advanced money in payment for the creation of new offices, thereby "taking a part" (*un parti*), according to the language of the time. The name of *traitants* was derived from their function as negotiators of financial paper. The financiers made advances to the farmers-general in anticipation of the collection of the taxes. The paper given in these transactions, and other evidences of the public debt, were the subject of quotation and speculation early in the seventeenth century. A profession of dealers in exchange, banking, and merchandise had been created by Charles IX. in 1572, and a distinction between the bankers and the merchants was made by a decree of the Council in 1638.[2] The *Caisse des Emprunts*, a sort of bank created by the farmers-general to meet demands for advances by the Treasury, was established as early as 1674 and received the deposits of the public at sight at an interest which occasionally reached ten per cent. This bank was seized by the Controller General, Desmarets, in 1715, and a part of the money sequestrated was made good by the issue of securities. Among the most famous of the financiers was Samuel Bernard, who accumulated a fortune under Louis XIV. estimated at 60,000,000 livres. The Paris brothers were also prominent at the court of "the Grand Monarch," and the most celebrated, Paris-Duvernay, was charged in 1721 with the readjustment of the finances after the collapse of the plans of Law.[3]

Each phase of banking was an almost necessary evolution of the conditions of the time. The money-changer followed the merchant in his voyages over the world, when merchandise and metallic money constituted the only instruments of

[1] Taine, *Ancien Régime*, 51, note.

[2] Jannet, *Le Capital au XIXe Siècle*, 449.

[3] Courtois, *Histoire des Banques en France*, 64.

exchange. The creation of uniform monetary systems and wide areas of trade under a single political sovereignty made his profession less important; but it was principally the organization of credit, permitting exchanges without metallic money, which reduced the money-changer to an essentially subordinate place [1] and gave birth to modern banking. The bill of exchange was one of the earliest forms of credit, and its use was extended beyond its present purposes in order to meet the necessities of the Middle Ages. To the Jews were ascribed the invention and perfection of the bill of exchange, as a means of evading the confiscation of their property by its prompt and secret transfer.

Two circumstances contributed to throw into the hands of the Jews the trade in money in the Middle Ages. One was the fact that they were shut out from all other trades; the other was the attitude of the church towards loans at interest. The acquisition of real property was prohibited to the Jews in nearly every European state. The guilds were closed to them and they were forbidden to exercise trades and manufactures.[2] The exclusion from real property was not a hardship, if they were to be subject to constant confiscations, since money and its paper representatives were almost the only forms of property which could be readily transported and concealed. "The richest traders," says Montesquieu, "having only invisible goods, they were able to be sent everywhere and left no trace behind." [3]

The denial of the legitimacy of interest was a natural evolution from conditions of the time. The rigors of the church were directed primarily against loans for consumption to persons in need. When saved capital was the exception, and opportunities for organized industry were rare, loans for productive purposes were the exception.[4] When

[1] The goldsmiths assumed the functions of the money-changers, as the latter lost their importance, and in 1514 the changers disappeared from the list of the six merchant bodies.—Cons, I., 196.

[2] Nys, 136.

[3] *De l'Esprit des Lois*, livre XXI., ch. xx.

[4] Prof. Jannet points out that the prejudice against loans at interest

the time came for escaping the restrictions of the canonical laws, several ways were found of doing so. Already, as early as the thirteenth century, Albert le Grand conceded that "if usury is against the perfection of Christian law, it is at least not contrary to civic interests." Even St. Thomas admitted the loss resulting (*damnum emergens*) to the lender who was kept out of his money, and the interval of time and the value lost (*quantum ejus intererat*) gave birth to the word interest as a substitute for usury (*usura*).[1]

Transportation of money from one place to another involved a cost which justified a charge. This charge was made sufficient to cover a reasonable interest for the use of money. Hence arose the provisions of many of the Continental codes of commerce, that the bill of exchange should be payable in a different place from that where it was drawn. The bill of exchange was converted into a form of direct loan called "dry exchange," by which the borrower drew a bill on a fictitious person in some foreign town at the current rate of exchange, which he delivered to the lender. At maturity the bill was returned protested and the borrower charged with re-exchange and incidental expenses, amounting perhaps to 20 or 30 per cent., the bill never having been out of the country.[1]

A further step was taken towards modern banking methods when the Italian bankers received cash under the name of deposits, but in reality to be made fruitful in the banking

was not without its justification before money came to be borrowed for the purposes of production, because the proceeds of the loan were usually consumed instead of multiplied, and if loans at interest had been universally approved they would soon have resulted in rural localities in the practical enslavement of the peasants who were unable to pay. The distinction between loans for production and for consumption was early recognized by the church, and the fifth Lateran Council (1512–17) decreed : "Ea est propria usurarum interpretatio, quando videlicet ex usu rei *quae non germinat* nullo labore, nullo sumptu, nullove periculo lucrum foetusque conquiri studetur."—*Le Capital, la Spéculation, et la Finance*, 81.

[1] Rambaud, *Histoire des Doctrines Économiques*, 40–42.

[2] Cossa, *Introduction to the Study of Political Economy*, 154.

and commercial operations in which they were engaged. These funds were represented by mandates, which differed little from the checks adopted many centuries later. The records of bankers regarding transfers of money had a recognized status in courts of justice, derived in some measure from the survival of their public character under the Roman Empire.

Thus gradually emerged from the need for them all the attributes of modern banking. The individual money-changer, the Jewish lender, the Lombard banker, gradually gave way, as centralization advanced in economic and political life, to public banks doing business under official authority. Along with this evolution went the development of methods suited to the new conditions. The complexity of coinage systems was remedied by the creation of "bank money" of uniform value by such institutions as the banks of Venice, Amsterdam, and Hamburg. The bill of exchange became a means for making productive loans. Deposits were accepted to be loaned for profit, and in these profits the depositor was permitted to share. The character of the loan changed from a specific deposit, transferable only by the owner, to a loan from the owner to the bank, for which he received a direct interest. The resources of modern savings, attracted into the keeping of the banks, became available for loans to the producing and trading elements in the form of discounts. Modern credit thus gradually received its organization and needed only the creation of the bank note and the extension of the mechanism of clearings and co-operation among the banks to stand forth fully equipped for providing the motive power of commerce.

CHAPTER II.

ANCIENT AND MODERN BANKING IN ITALY.

Italy the Mother of Modern Banking in the West—Conditions before the Unification of the Kingdom—Specie Suspension and the Era of Depreciated Paper during the Struggles for Lombardy and Venetia—Rise of the Bank of Italy—The Bank Scandals of 1893—Flight of Subsidiary Silver to Other Countries—Recovery of National Credit in the Twentieth Century.

ITALY is the mother of modern banking in the West, not only as heir of the Roman bankers of antiquity, but as the first country to develop the mechanism of modern credit under the light of the Renaissance. Of the Bank of Venice and of other early Italian banks, the story has already been briefly told. The disorders which came on the heels of the French Revolution, wiping out the boundaries of states and destroying the freedom of the Italian cities, put an end also to most of the ancient banks. The only one which survived was a land and mortgage bank called *Monte dei Paschi*, at Sienna, which was believed to date back to the seventeenth century. The first effort to found a modern bank was made at Genoa upon the foundations of the old Bank of St. George. The effort was not successful, and, in the opinion of M. Courcelle-Seneuil, this is not to be regretted, "for the Bank of St. George was adapted to customs and commercial usages which have ceased to exist." The next attempt to establish a banking system in Piedmont was made by letters patent of King Charles Albert, under date of March 16, 1844. The new bank was to be known as the Bank of Genoa, to have a

capital of 4,000,000 lires ($800,000), and to be under the supervision of a royal commissioner and sub-commissioner. The bank received a subvention of 4,000,000 lires from the government during 1846 and the following years, upon which it paid interest at two per cent. A bank was founded at Turin on October 16, 1847, with a capital of 4,000,000 lires, but the political and economic crisis of 1848 checked its development. A royal ordinance of December 14, 1849, authorized it to unite with the older bank under the denomination of the National Bank of Sardinia, with head offices at both Genoa and Turin. The duration of the new establishment was fixed at thirty years, beginning on January 1, 1850, and its capital at 8,000,000 lires, which was afterwards increased to 32,000,000 lires ($6,200,000).

The government in 1848 resolved upon a loan of 20,000,000 lires, which the Bank of Genoa was required to furnish at two per cent., upon the pledge of the goods of the Order of Saints Maurice and Lazarus. Forced legal tender character was given to the bank-notes and an increase in issues permitted of 20,000,000 lires. The smallest notes were reduced from 250 lires ($50) to 100 lires ($20) with the condition that the notes of 100 lires should not be issued to the amount of more than one-fifth of the total circulation. The loan was reimbursed to the bank and specie payments were resumed at the end of 1849.[1] The bank from that time followed the fortunes of the Royal House of Sardinia, and extended its branches and operations with the success of the Sardinian arms and the consolidation of the Italian States. It was necessary in 1856 to authorize the bank to exceed the maximum note circulation allowed by its statutes, which was three times the cash reserve. The bills of the bank were again made legal tender, with suspension of cash payments on April 27, 1859, on the occasion of the war with Austria, and the bank was authorized to issue 6,000,000 lires in notes of twenty lires ($4) and to open a credit for the government to the amount of 30,000,000 lires at two per cent. The bank

[1] Courcelle-Seneuil, 354.

was prudently conducted, the government did not draw its full credit, and the notes fell but little below par. Their circulation was extended on June 11, 1859, to the entire territory occupied by the Sardinian troops.

The bank was reorganized at this time as the National Bank of the Kingdom of Italy, in pursuance of the plans of King Victor Emmanuel for the unification of Italy. Its capital was increased to 40,000,000 lires ($8,000,000) and three head offices of equal rank were established at Turin, Genoa, and Milan, the latter being a new office within the territory added to the new Kingdom of Italy. The bank resumed specie payments and opened a credit of 18,000,000 lires in favor of the government. Branches were established in 1860 at Bergama, Brescia, Como, Modena, and afterwards at Ancona and Perusia. The bank absorbed the leading banks of Bologna and Parma and established branches at Ferrara, at Forli, and at Ravenna. The annexation of Naples to the Kingdom of Italy did not result in the destruction of the Banks of Naples and Sicily, but the National Bank was authorized to establish a principal branch at Naples and branches at Catana, Messina, Reggio, and other places in Southern Italy. Branches were also authorized at this time at Pavia, Cremona, and Piacentia.

The character of the National Bank of the Kingdom of Italy was not essentially changed until the Act of August 10, 1893, but its relations to the government constantly grew closer and it was compelled to accept forced legal tender for its notes in order to comply with demands for advances to the State. Suspension of specie payments was decreed at the outbreak of the war in 1866, although the capital of the Bank had been increased by the decree of June 29, 1865, to 100,000,000 lires ($20,000,000). The provision for the suspension of specie payments, with legal tender quality for the bank-notes, applied only to the National Bank, but the latter was required to furnish circulating notes without charge to other banks of circulation. The depreciation of the bank-notes drove the subsidiary coins out of circulation, and many small banks of deposit, commercial houses, and even retailers, issued

certificates of one lire and 50 centimes to take their place. The government in 1868 sought to drive these notes out of circulation by authorizing the issue of notes for one lire by the regular banks of circulation, which were made legal tender for a limited sum throughout the Kingdom. The bank made handsome profits, as usual when specie payments are suspended, made large advances to the government and again increased its capital to 200,000,000 lires under authority of a law of April 9, 1872.[1]

The policy of the Italian government to introduce unity into every branch of Italian affairs was pursued cautiously in the case of the bank-note circulation and without the hasty abrogation of the rights of the banks. No new bank could be constituted without the authority of a special law, but five banks of circulation conducted business without interference by the side of the National Bank of Italy. The Roman Bank, founded in 1851 with a privilege secured until December 31, 1889, had a capital of 15,000,000 lires and while Rome was independent of the Kingdom of Italy was under the protection in a measure of the Papal power. The National Bank of Tuscany was established in July, 1857, with a capital of 30,000,000 lires and the Tuscan Bank of Credit was established for thirty years in March, 1860, with a capital of 10,000,000 lires, of which only half was paid in. Both these banks were located at Florence. The Bank of Naples was founded as early as 1794 and the capital was contributed in part by the State. It had a head office at Rome and about a dozen branches. The Bank of Sicily was also an old establishment, with its headquarters at Palermo, four principal offices in other parts of Sicily and branches at Rome and elsewhere in Italy. The capital of the Bank of Naples was originally 32,500,000 lires and that of the Bank of Sicily was 8,000,000 lires. The authorized circulation of these banks under the law of 1874 was 450,000,000 lires for the National Bank of Italy ; 45,000,000 lires for the Roman Bank ; 63,000,000 lires for the National Bank of Tuscany ;

[1] Juglar, Article " Banques," in *Dictionnaire des Finances*, I., 344.

15,000,000 lires for the Tuscan Bank of Credit; 146,250,000 lires for the Bank of Naples, and 36,000,000 for the Bank of Sicily, making a total of 755,250,000 lires ($150,000,000).[1]

The necessity of maintaining public credit, and some complaints by the other banks that they suffered by the special favors granted to the National Bank, led to legislation in 1874 which established the Consorzio. This arrangement formed the banks into a syndicate for the withdrawal of the notes issued directly on behalf of the government and the substitution of a like sum (840,000,000 lires) in bank bills of the National Bank, which were made legal tender throughout the Kingdom. The notes issued by the provincial banks on their own account were to be legal tender only within the province in which the bank was established. The government voted itself the authority to increase its loans from the associated banks to 1,000,000,000 lires ($200,000,000) and to demand a certain proportion of the amount in gold. The government pledged itself to deposit five per cent. securities as the guarantee of the loan and to pay a low rate of interest. The advances actually made to the government under this arrangement reached 940,000,000 lires, of which 600,000,000 was reimbursed from the product of a specie loan authorized by the law of April 7, 1881, and the remainder was transformed into government bills. The Consorzio came to an end with the abolition of forced legal tender in 1884. The circulation of the banks was slightly increased by the law of June 30, 1891, which admitted a maximum limit equal to the mean circulation of 1890.

The suspension of specie payments, the failure of the Roman Bank, and the almost complete collapse of the banking system of Italy came about in the latter part of 1892 and the beginning of 1893 as the result of wilful violations of law by the banks and the guilty connivance of public officials. The Roman Bank was accused of exceeding its circulation at almost the same moment that the director of the Roman branch of the Bank of Naples, Signor Cucciniello,

[1] Alfred Neymarck, Article "Banque," in *Dictionnaire d'Économie Politique*, I., 141–42.

fled with his secretary, leaving obligations of 2,000,000 lires ($400,000) and compelling the branch to close. It was found that the excess of note issues had been distributed among the politicians by the thousands and hundreds of thousands. A Roman deputy had received 4,000,000 lires; a former minister, 2,000,000 lires; a well-known financier, 1,500,000; a newly elected deputy, 1,000,000; a former editor, 150,000; and others, various sums from 1,000 to 500,000 lires.[1] Some of these sums were put in the form of loans and advances, but the security was nominal, many of the loans were long over-due, and Signor Tanglongo of the bank management declared that he had been compelled to retain these people by the orders of several ministers and of a president of the council.

An official investigation was ordered and the report by Senator Finali showed that three of the banks had exceeded the legal limit of their circulation and that all had tied up their assets to an alarming extent in securities which could not be readily negotiated. The excess of circulation in the case of the Roman Bank was 64,543,230 lires; the Bank of Sicily, 14,917,203 lires; and the Bank of Naples, 2,041,501 lires. It was found that the National Bank also had issued 53,700,000 lires illegally by order of the administration. The funds not readily negotiable at sight were reported as 628,620,686 lires, or nearly twice the capital and reserves of the banks, the Tuscan Bank of Credit alone being in a sound condition.[2] The loans upon mortgages and other securities slow to realize were 199,756,000 lires, and what were called the "Direct Employments" of the funds, in Treasury bonds and other paper below par or of doubtful value, were 172,343,000 lires. The deputies who had paper over-due were found to number sixteen, and the amount of the paper was 5,922,410 lires, some of it going back to 1878. There were nine more deputies who had obtained renewals to the amount of 641,670 lires. Among the latter was Premier Crispi, with loans of 244,000 lires which had been renewed since 1887.

[1] *Revue des Banques*, March, 1893, XII., 335.

[2] *Revue des Banques*, May, 1893, XII., 378.

It was stated that a report of August 30, 1889, had shown a clandestine circulation of 9,000,000 lires by the Roman Bank, and that it was known to Signor Crispi, then President of the Council of Ministers, as well as to Signor Giolitti.[1]

These discoveries were a death-blow to the Italian banking system as it then existed. The Roman Bank was compelled to liquidate, and its affairs were taken in charge by the National Bank. The privilege of the banks expired in 1889 and 1890, but had been renewed for brief periods until the close of 1892. A law was then pending, proposed by Signor Grimaldi, which provided for a renewal for six years, and that every bank should accept the notes of the others. But this project went by the board when the rottenness of the existing banking system was discovered, and the government seized the opportunity to push a step further the policy of unity and consolidation. The National Bank of the Kingdom was badly compromised, and the redemption of its notes in specie was indefinitely suspended, but it was made the basis of the new institution founded by the law of August 10, 1893.

The new law provided for the fusion of the National Bank of the Kingdom of Italy with the National Bank of Tuscany and the Tuscan Bank of Credit. The name of the new institution is simply the Bank of Italy, and it is required to establish offices or branches wherever they have been established by the National Bank of Tuscany. The capital of the new bank was fixed at 300,000,000 lires ($60,000,000) and its privileges were confirmed for twenty years. The Roman Bank was already in process of liquidation when this act was passed, so that the only remaining banks of issue are those of Naples and Sicily. The maximum limit of circulation during the continuance of the forced legal tender policy, was fixed at 800,000,000 lires for the Bank of Italy, 242,000,000 lires for the Bank of Naples, and 55,000,000 lires for the Bank of Sicily. This circulation is to be reduced every two years after 1897, and until in 1907 it shall stand

[1] *Le Marché Financier en 1893–94*, 131.

at 630,000,000 lires for the Bank of Italy, 190,000,000 for the Bank of Naples, and 44,000,000 lires for the Bank of Sicily, making a total of 864,000,000 lires. If either bank, at the end of fourteen years from the date of the law, lacked a reserve corresponding to one-third of its circulation, the circulation was to be reduced within three months, and the amount of the reduction transferred to the banks which held or paid in the necessary reserve.[1] The banks are authorized to increase their circulation beyond the legal limits when their notes are entirely covered by legal coin or by gold bullion, and notes may be issued beyond the limit for the purpose of advances to the government.

The reserves of the banks, when on a specie basis, are fixed at forty per cent. of the circulation, including thirty-three per cent. in coin or bullion and the remainder in foreign bills of exchange approved by the Minister of the Treasury. The metallic reserve is required to consist of gold in the proportion of at least three-quarters. The law provided that bills then in circulation should cease to be a legal tender after December 31, 1897, and should no longer be redeemable after December 31, 1902. A permanent supervision over banks of issue is established through a board consisting of the Minister of Agriculture, Industry and Commerce, and the Minister of the Treasury. A special inspection is to be made under the authority of these ministers every two years, and the results reported to Parliament within three months. The nomination of the director general of the Bank of Italy must be approved by the government. One of the provisions of the law provided that if the deposits exceeded a certain figure, the bank must reduce its circulation by three-quarters of the deposits bearing interest in excess of the limit; but this provision was suspended by decree of January 23, 1894.[2]

The new banking law did not rescue Italy from the *régime* of depreciated currency and was probably not expected to do so. The government was reduced to subterfuges to in-

[1] Section 2, Law of August 10, 1893, *Bulletin de Statistique*, XXXIV., 254.

[2] *Bulletin de Statistique*, February, 1894, XXXV., 207.

crease the volume of paper money and provide itself with funds to meet pressing obligations. The decree of January 23, 1894, permitted a supplementary issue of bank-notes to the amount of 90,000,000 lires for the Bank of Italy, 28,000,000 for the Bank of Naples, and 7,000,000 for the Bank of Sicily. These new issues were not directly authorized, but the penal tax imposed by the banking law was reduced to two-thirds of the rate of discount up to the limit of the proposed new issue. A decree a month later, February 21, 1894, purported to put a limit of 600,000,000 lires on the circulation of State notes, and Article 5 of the same decree provided that the banks might redeem their notes on presentation at the market rate of depreciation. This favor was only to be accorded, however, to the banks which complied with the requirement of Article 2, that they transfer to the credit of the government 200,000,000 lires in gold and accept a new issue of government notes as a substitute.[1] The new notes, of which 145,000,000 lires were apportioned to the Bank of Italy, 45,000,000 lires to the Bank of Naples, and 10,000,000 lires to the Bank of Sicily, were thus nominally covered by gold, but no provision was made for reducing the volume of outstanding bank-notes or for replacing the gold withdrawn from the bank reserves.

The result of measures like these was to drag Italy deeper and deeper into the mire, make the rates of foreign exchange more and more unfavorable and the receipts of the Treasury of constantly diminishing value in gold. The additional issue of bank-notes authorized by the decree of January 23, 1894, was avowedly for the purpose of meeting the demands of the depositors in the savings banks, who upon demanding the restoration of the deposits they had made in good money were reduced to the choice of leaving their deposits in the hands of a discredited government or accepting the paper promises of the suspended banks. One of the expedients adopted to protect the Treasury was the levy of a tax of twenty per cent. on the interest of the public debt, which was

[1] *Bulletin de Statistique*, March, 1894, XXXV., 335.

only an indirect way of scaling the interest on the consolidated five per cents. to four per cent.[1] The depreciation of the paper currency became so great as to drive all subsidiary coins out of the country and make it difficult to get change for a note of a few lires. Twenty million lires was issued during 1894 in nickel pieces of twenty centimes, and the government congratulated themselves on a profit of 17,500,000 lires by means of the seignorage.

The flight of subsidiary money from Italy carried it to France, Switzerland, and, to some extent, to Belgium, where it passed in ordinary transactions upon the same terms as the money of those countries. So much Italian silver drifted into Southern France that the French government made an investigation of the amount received on a given day at some of the leading banks and found that Italian pieces constituted 28.78 per cent. of the entire subsidiary circulation. Belgian, Swiss, and Greek pieces constituted 12.30 per cent., so that the proportion of French coins was only 58.92 per cent. Italian subsidiary coin constituted more than seventy per cent. of the circulation in Savoie and the Maritime Alps and from 45 to 60 per cent. in eight other departments between the Rhone and the Alps.[2] A conference of the states of the Latin Union, held at Paris, reached an agreement on November 15, 1893, by which the Italian subsidiary coins were to cease in four months to be received by public depositaries in France. Those in the Bank of France were, upon presentation to the Italian government, to be redeemed half in gold and half by bills of exchange. The amount thus presented up to the close of 1894 was 57,222,279 lires.[3] The policy adopted by the Italian government for preventing the continued exportation of the silver, of locking it up in the Treasury and issuing small notes against it, was sanctioned by the conference upon the condition that the subsidiary

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[1] *Le Marché Financier en 1893–94*, 136.

[2] *Le Marché Financier en 1893–94*, 348–68.

[3] *Assemblée Générale des Actionnaires de la Banque de France du 31 Janvier, 1895*, p. 9.

silver of Italy should never exceed the limit of six lires per head originally fixed by the Latin Union.

The report of the Minister of the Treasury, Sidney Sonnino, to the Chamber of Deputies, on December 10, 1894, offered only a distant hope of the restoration of sound financial conditions in Italy. The result of the special examination of the banks in February was, in his own words, "not very favorable." The Minister proposed a somewhat elaborate scheme of law to put in effect a convention between the bank and the Treasury. The period of liquidating the unavailable assets of all the banks was extended to fifteen years. The Bank of Italy assumed the liquidation of the affairs of the Roman Bank and received in return the custody of the public funds in the provinces, paying interest at one and a half per cent. on sums above 40,000,000 lires. The bank was required to deposit with the Treasury a guarantee fund of 50,000,000 lires in national securities and to increase the amount within six years to 90,000,000 lires; to increase the limit of advances to the Treasury from 90,000,000 to 100,000,000 lires; to call upon shareholders for an assessment of 100 lires per share, amounting to 30,000,000 lires, and to reduce the capital by an equal amount. The bank was required to set aside 4,000,000 lires in 1894, 5,000,000 lires in 1895, and thereafter 6,000,000 lires annually, to be invested in national securities to form a reserve fund to cover the losses by the Roman Bank, and any profit which might remain was allowed to be divided among the shareholders to a maximum limit of 40 lires per share.[1] This remarkable method of liquidation, — by converting locked-up assets into a new form of such assets, instead of paying off liabilities,—was approved by the shareholders of the Bank of Italy on February 25, 1895, for they practically had no option but to accept the proposals of the government.[2]

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[1] *Bulletin de Statistique*, December, 1894, XXXVI., 587–89.

[2] Raffalovich, *Le Marché Financier en 1894–95*, 177.

Out of these difficulties Italy was lifted within a few years by the constructive ability of her leading statesmen and the recuperative energy of her people. Already, before the outbreak of the bank scandals of 1893, Signor Rudini, the Premier of the day, had urged the adoption of rigid economies in all branches of the public administration and had deplored the "multiplied and gigantic projects, out of proportion to her powers," which had been saddled upon the budget of the kingdom.[1] The first efforts at reform were counteracted by the cost of the expedition to Erythrea, which failed so disastrously in 1896; but with the advent of Signor Luzzatti to the head of the finances a surplus of 9,000,000 lires took the place in 1898 of the recurring deficits which had so complicated the relations of the Treasury with the banks. Reciprocity with France, abandoned in 1887 with disastrous results to Italian exports, was reëstablished November 21, 1898, and was followed by an increase in total exports from 1,091,000,000 lires ($210,000,000) in 1897 to 1,472,000,000 lires ($284,000,000) in 1902.[2] Remittances to meet the interest on the national debt held abroad were reduced for several years by the drastic process of the return of the debt to Italy, until interest payments abroad fell from 192,000,000 lires in 1893 to 105,000,000 lires in 1897.[3]

But these measures of rectification began to produce results. From 1891 to 1902 public revenue advanced by 203,400,000 lires, while expenditures advanced only by 62,560,000 lires, and the total surplus of the budgets for five years ending with 1902 was 212,300,000 lires ($41,000,000).[4] Exchange on Paris, which reached a maximum in 1894 of 115.70, fell to a minimum in 1901 of 101.50, and in August, 1902, it was hailed as a notable event that the premium was only 80

[1] Fochier, in *Questions Monétaires Contemporaines*, 454.

[2] The denunciation of the treaty with France was due partly to political motives and was accompanied by withdrawals of French capital from Italian investments.—Brouet, 14.

[3] *Vide* the author's *Principles of Money and Banking*, II., 346.

[4] Théry, *Situation Économique et Financière de l' Italie*, 82.

centimes, or four-fifths of one per cent.[1] Then came in October the restoration of parity, which has ever since been substantially maintained.

Both the Treasury and the banks aided in the restoration of sound conditions. The Treasury began in 1898 the retirement of the small notes which had driven silver across the French and Swiss borders, and by 1903 had reduced the amount from 110,000,000 lires to 2,358,000 lires. A decree of February 18, 1899, restored to circulation 20,000,000 lires in subsidiary silver, and a law of March 3d reduced by 45,000,000 lires the special circulation of the Treasury.[2] Customs duties were collected in gold, with the result of a rapid increase of gold resources. On behalf of the failed banks, the Bank of Italy addressed itself resolutely to reducing the mass of locked up or unliquid assets, which amounted in 1894 to about 501,000,000 lires ($96,700,000). This amount was reduced by the close of 1899 to 245,000,000 lires, in spite of some friction with the government in the latter year over the proposal to create a special corporation to take the matter in hand.[3] The Minister of the Treasury, at the beginning of 1903, in his presentation of the budget, declared that it was "an immense advantage for the general economy of the country to possess, like other great states, a potent organism which knows how to exercise the double function of regulator of the money market and of a faithful and trustworthy aid to the public finances."[4]

Some changes were made by a law of 1900 in the statutes of the banks of Italy affecting their note circulation. The legal limit of issue not fully covered by the reserve was to be subjected to an annual reduction which should leave the total in 1906 for the Bank of Italy at 630,000,000 lires; Bank of Naples, 190,000,000 lires; and Bank of Sicily, 44,000,000 lires.[5] The banks were required to accumulate a reserve of

[1] Fochier, 467.

[2] Raffalovich, *Le Marché Financier en 1898–99*, 593.

[3] *Économiste Européen* (April 6, 1900), XVII., 443.

[4] Théry, 148.

[5] Arnauné, *La Monnaie, le Crédit et le Change*, third edition, 446.

forty per cent., part of which might be in foreign securities. Excess issues subject to tax continued to be permitted, substantially as provided by the law of 1893. This law, however, imposing a charge of two-thirds of the rate of discount on the amount of the circulation in excess of the legal limit, was modified by a law of December 31, 1907, so as to afford a little greater elasticity to the movement of the circulation.[1] The time seemed at length to have come when the danger was passed that the circulation would be unduly expanded and when the legitimate business demands of the country had more than grown up to the limits imposed by law. The bank was subjected to severe pressure during the crisis in America. Discounts rose from 398,290,560 lires on July 31, 1907, to 494,988,781 lires on November 30th, and advances rose in the same interval from 40,002,533 lires to 75,257,128 lires. The discount rate was advanced to five and a half per cent.—the highest rate touched since 1894. The demand for accommodation, while it swelled note issues from 1,265,692,550 lires on June 30th to 1,412,418,450 lires on November 30th, did not at any time cause a reduction of reserves, which increased during the same interval from 932,014,944 lires to 1,099,995,262 lires ($212,300,000). Only during five weeks of this period was circulation issued under the special tax and the maximum subject to tax was only 48,619,046 lires ($9,480,000).

The adequacy of the reserve was no longer in question at the Bank of Italy in 1907. The gold held at the close of that year was 896,307,000 lires ($173,000,000) and the silver 122,475,000 lires ($23,640,000). Between the maximum and minimum circulation there was a difference of 304,000,000 lires, or 21.4 per cent. of the maximum.[2]

The Bank of Italy, like the Bank of France, rediscounts much paper for small amounts for the benefit of retail tradesmen. The classification of the paper discounted during 1907, which reached a total value of 2,261,968,257 lires ($436,500,000), showed that 232,387 pieces were for amounts

[1] *Adunanza Generale Ordinaria degli Azionisti, 1908*, 9.

[2] *Ibidem*, 35.

up to 100 lires ($19.30) and 1,147,640 pieces for amounts from 100 lires up to 1000 lires ($193), leaving only 268,534 pieces for larger amounts.[1] The average value per piece of paper discounted was 1397.52 lires and the average term 59 days. The average value in 1904 was 959.41; in 1905, 1140.75; and in 1906, 1204.44 lires.

The following table shows the principal items of the balance sheet of the Bank of Italy for representative years since the failures of 1893:

THE BANK OF ITALY.

DEC. 31	METALLIC RESERVE	CIRCULATION	CURRENT ACCOUNTS AND DEPOSITS	DISCOUNTS	ADVANCES
		(in millions of lires)			
1894	362	826	213	191	28
1896	364	773	208	221	24
1898	367	831	232	313	14
1900	351	820	192	331	35
1902	402	855	172	344	46
1904	562	914	185	340	39
1905	720	1005	185	401	72
1907	1018	1411	212	480	71

The Bank of Naples has shared in some degree the prosperity of the national bank. Material progress was made after 1900 in the liquidation of mortgage obligations, and savings deposits attained a volume second to those of only one other institution in Italy.[2] Total assets at the close of 1907 were 590,597,829 lires ($114,000,000), of which 181,153,631 lires was in gold, 15,810,131 in silver, 107,255,871 in commercial paper, and 80,285,532 in government securities. Circulation was 360,319,200 lires ($59,500,000) and current debtor accounts were 88,921,791 lires.

[1] *Adunanza Generale Ordinaria degli Azionisti, 1908*, 27.

[2] *Économiste Européen*, May 1, 1908, XXXIII., 572.

CHAPTER III.

BANKING IN FRANCE.

The Events Out of Which the Bank of France has Grown—The Mississippi Bubble of John Law and its Collapse—The Banks of Paris before the Revolution—Failure of the Assignats and the Revival of Commercial Banking—Birth of the Bank of France and its Absorption of the Departmental Banks—The Latin Union and the Embarrassments Caused by the Fall in the Price of Silver —The Recent Renewal of the Bank Charter.

THE Bank of France is the greatest and in many respects the strongest of the banks of the world, and its development exhibits many of the most interesting phases of banking history outside of Great Britain. French banking is done pre-eminently through the issue of circulating notes, and the per capita monetary circulation of France is greater than that of any other country. The origins of banking in France go back to the "Mississippi plan" of John Law, but its history during the present century has been essentially one of prudence and moderation, if not always of the most enlightened financial policy. Monopoly of the power of note issue now belongs to the Bank of France, but is far from having been its immemorial right. The *régime* of the independent departmental banks, which were absorbed by the central institution in 1848, is still recalled with pride by many French economists, and the most recent expiration of the charter of the Bank of France inspired them to a renewal of the contest then so warmly waged between "monopoly" and "liberty."

The first French bank of issue was created by John Law under the regency of the Duke of Orleans, at the beginning

of the eighteenth century. Scotland, which gave to the world the founder of the classical school of political economy in Adam Smith, was also the birthplace of Law, the author of "The System" which introduced the use of negotiable securities on a broad scale into France. The name of Law has been synonymous with the most reckless speculation and brazen fraud, but the bank which he founded was at the outset conducted upon conservative principles, and even the system of the "Company of the West" (*Compagnie d' Occident*), more generally known as the Mississippi Company, was conceived upon broad and not impossible lines before the stock was made the plaything of speculation. Law desired to establish a royal bank of state, but the government was only willing to grant a charter for an institution managed by private citizens. The bank thus founded by letters patent May 2, 1716, was authorized to issue bills in crowns of specie under the name of "bank crowns," redeemable in money of the weight and denomination of the day of issue.[1] This was intended to guard the bank-notes against the possible fluctuations and changes in the metallic standard and give them some such preference as that given to the "bank money" of the Bank of Amsterdam. The feature which rapidly attracted subscriptions to the stock was Law's offer to accept payment at the rate of twenty-five per cent. in specie and seventy-five per cent. in bills of state, which were at a discount of about seventy-five per cent.

Discount was granted by the bank at the rate of five per cent., and officers of the finances received orders in October, 1716, to make their remittances upon Paris in bank-bills, and to redeem these bills at sight when presented to them. Another official decree of April 10, 1717, authorized the receipt of the bills as money for the payment of public revenues. If the bank had continued upon the sound basis of a bank discounting commercial paper and acting as the fiscal agent of the Treasury, France would have been under a great debt of gratitude to Law for introducing into her commercial relations the methods of the modern

[1] Courtois, 10.

business world. Prof. H. Dunning MacLeod, as keen a thinker and acute a critic as has written upon monetary subjects, says :

> Nothing could be more extraordinary than the restoration of prosperity caused by the foundation of Law's Bank in 1716. It is probably one of the most marvellous transitions from the depths of misery to the height of prosperity in so short a space of time in the annals of any nation. And, if Law had confined himself to that, he would have been one of the greatest benefactors any nation ever had.[1]

But Law had much more comprehensive schemes than the creation of a bank of discount. He determined to unite into a single great monopoly the various commercial companies which had been incorporated since the discovery of America, for the purpose of trade and the extension of French influence. Courtois enumerates no less than thirty of these corporations which had been authorized during the previous century, but many of them had languished, run in debt, and been consolidated with others. Law proposed a stock company with a capital of 100,000,000 livres, divided into 200,000 shares of 500 livres each, payable in bills of state which were still at a discount of about sixty-six per cent.[2] The State was to pay the company an annual interest of four per cent. on the principal of the bills withdrawn by this means from circulation.

The *Compagnie d'Occident* was incorporated by a decree of August 28, 1717, registered by the Parliament on September 6th, for a duration of twenty-five years. Four companies were consolidated at the outset, which controlled the commerce of Louisiana, Canada, and the Western Coast of Africa, and the new company was to enjoy all the rights of sovereignty over the lands which it possessed. The shares, which were made out in certificates of one share or ten,

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[1] *Theory and Practice of Banking*, II., 254.

[2] The variations in the coinage at this time were such as to make a statement of the value of coins an almost impossible task, but the livre may be taken in a general way as about the equivalent of the later franc—19.3 cents in United States gold coin. For a full account of the changes in the coinage system, see Shaw, 396–423.

were transferable by bearer, a system for the first time introduced into France, so far as known ; for even the shares of bank were made out to the owners. Law proceeded to make negotiations with the government through his friend, the Regent, for farming the taxes, for coining money, for managing the tobacco monopoly, which had been under the control of the State, and for assuming the entire public debt. He introduced a number of reforms into the collection of the taxes by discontinuing the collection of those which were disproportionately costly and vexatious in proportion to the amount obtained, and he proposed more sweeping changes which would have abolished needless offices, consolidated various imposts into one, and removed some of the fetters from French commerce.

The attribution of all these public functions to a single company, as well as the management of the commerce of two continents, would in themselves probably, as Law's great opponent, Paris-Duverney, pointed out, have caused the organization to break down of its own weight, and have attracted the jealousy of the government. But Law, and those who were carried away with him by the grandeur of the new scheme, did not wait for the slow operation of commercial causes to sow the seeds of destruction of their enterprise. He succeeded in having the bank transformed into a public institution (*Banque Royale*) by a decree of December 27, 1718, and had the stockholders reimbursed in specie for their subscriptions. Redemption of the notes in bank crowns was abandoned by the decree which made the bank a public one, and redemption was required only in the official money of the country. This move created a degree of distrust which led to a new decree of April 22, 1719, that bills payable in the existing standard should not be subject to the diminutions which might affect specie. The tendency of such a decree was to put the bank-bills at a premium over current coins, which were being perpetually debased and altered by the wretched administration of the finances. The total circulation of bills in April, 1719, the date of the last decree, was 110,000,000 livres ($22,000,000).

Meantime the shares of the *Compagnie d'Occident* were undergoing a remarkable experience. They were sold rather slowly at first and the principal subscription was by the former stockholders of the bank, who subscribed their receipts from the bank shares (1,125,000 livres in bills of state and 375,000 livres in specie) for the stock of the new company. Law found it necessary, in order to stimulate the sale of the shares, to buy publicly some two hundred shares at par, of which 200 livres per share was paid as a margin, with the option of completing the transaction in six months. Dealing in options (*marché à prime*) was thus brought into general practice for the first time in France. The making of the contracts for the tobacco monopoly, the extension of the commercial operations of the company and the wresting of the farming of the revenues from the Paris brothers, who had formerly controlled it, gave a great stimulus to the market value of the stock, and Law was authorized to issue fifty thousand new shares at a premium of one hundred per cent., to pay the government the sum guaranteed by the new contracts. The value of the old shares was maintained by requiring their presentation to obtain the new ones. The original issue thus came to be known as the "mothers" (*mères*) of the second, which were called the "daughters" (*filles*), while the third issue was known as the "granddaughters" (*petites-filles*). The contract with the government for assuming the entire public debt upon a pledge by the state to pay annually three per cent. interest was authorized October 12, 1719, and the payment of the interest was assured to the company by its contract for collecting the revenues. Three successive issues of one hundred thousand shares in the *Compagnie des Indes*[1] were thought necessary to carry through this gigantic operation. The new shares were of a par value of 500 livres each but were issued at a price of

[1] The name of the *Compagnie d'Occident* was changed to the *Compagnie des Indes* in May, 1719, when the privileges of the two companies of the West Indies and of China were absorbed by Law's Company, and the new name was retained until the dissolution of the company in 1769.—Courtois, 20.

5000 livres, payable ten per cent. a month. The presentation of the old shares was not required for the purchase of these last issues and the price was rapidly forced upward until 10,000 livres per share was attained in November, 1719.

Whatever might have been the success of so comprehensive a scheme under sound management, the fever of speculation had forced the shares to a point where a reasonable dividend was impossible. Law announced at a general meeting of the shareholders on December 30, 1719, a total revenue of 91,000,000 livres,—48,000,000 from the interest on the public debt, to be retained from the taxes; 12,000,000 from profit on the farming of the taxes; 6,000,000 from tobacco; 1,000,000 from general taxes not covered by the farming of the revenues; 12,000,000 from profits of the coinage; and 12,000,000 from the commercial operations of the company. The actual par value of the outstanding shares was 312,000,000 livres, which would have afforded a profit of nearly thirty per cent., and a dividend of 200 livres per share was actually declared on January 1, 1720; but the shares had been selling at 12,000 livres, or twenty-four times their par value, which afforded an actual dividend of only one and two-thirds per cent. Notwithstanding the doubtful character of some of the profits claimed and their palpable insufficiency to pay large dividends upon such an inflated investment, the phrenzy of speculation forced the shares by January 6, to 18,000 livres—thirty-six times their nominal par value. The Rue Quincampoix, between the Rue Saint-Denis and the Rue Saint-Martin, had been since the close of the reign of Louis XIV. the meeting place of speculators and dealers in the public stocks. Such operations attained a new extension by the speculations in the shares of the *Compagnie des Indes.* Fortunes were won and lost in a day and feeling became so violent that the place was closed by the government and the speculators were driven into obscure corners in other parts of the city, where they were constantly on the watch for the police.[1]

[1] The decree of October 25, 1720, forbidding speculative operations in the public streets is of interest because it established the sixty

The New Year of 1720 and the declaration of the dividend marked the apogee of Law's system. The craze had substantially run its course and the reaction was setting in. Prices were rising under the impulse of the excessive issues of bank-bills and the more prudent speculators were endeavoring to convert their gains into more solid property by the purchase of real estate or by shipping gold abroad. The bank had already been authorized to issue 1,000,000,000 livres and there had been issues without authority and counterfeits, which were easily made because the genuine bills were so rapidly and crudely turned out. Specie began to disappear and the subsidence of speculation made the bills redundant. Law adopted the now familiar argument in favor of paper money, that it was to be preferred over coin because it was non-exportable. A series of decrees during the early months of 1720 sought to discredit coined money and maintain the currency of the bank-bills. The nominal value of coin was reduced; the quantity of specie which an individual was permitted to hold was limited; the sale of vessels of gold or silver was prohibited; the carrying of diamonds and precious stones was prohibited; the circulation of bills throughout the realm as legal tender was decreed; an advantage was accorded those who paid certain taxes in bills rather than specie; and special jurisdiction was given the Council of State for causes concerning bank-bills.[1] All these measures failed to maintain confidence in the super-

agents of exchange (*agents de change*) who still form the legal body of the Paris Bourse. Their places are transmissible and hereditary. The Bourse decides what stocks shall be admitted to its lists and only those representing a large capital are ever listed. The corporation which has been formed by the members inspires absolute confidence in its operations by voluntarily assuming corporate responsibility for the acts of its members in their legitimate capacity as brokers. This corporation has instituted a clearing house and was strong enough in the crisis of 1882 to borrow 80,000,000 francs ($16,000,000) from the Bank of France, guaranteed by the Rothschilds to the amount of 40,000,000 francs and by the leading societies of credit for 40,000,000 more.—Jannet, 347–48.

[1] Courtois, 44.

abundant mass of paper and the control of the bank was turned over to the *Compagnie des Indes*. The company was authorized to convert at the will of the holders shares in the company into bank-bills or to redeem bills in shares, at a fixed price of 9000 livres per share. The contest of paper money against the metals was continued by a decree of March 11th, suppressing gold and silver as legal tender and providing for the confiscation of gold or silver, whether coin, bullion, or vessels, when found in the possession of subjects.

But the tide had turned and could no longer be stemmed. The fall in the stock continued, the company suffered in its commercial operations by the pest, which closed the free port of Marseilles, and a decree of May 1, 1720, scaled the value of shares from month to month until they should be reduced on December 1st, to 5500 livres and bank-bills should be reduced to fifty per cent. of their par value. Panic seized upon every holder of either form of paper, as he saw the values of his property shrinking under legal decree with every passing day. A commission was appointed to examine the bank and found that against 3,000,000,000 livres of circulation it held 21,000,000 livres in coin, 28,000,000 in bullion and 240,000,000 in commercial bills,—less than ten per cent. of assets in all against its outstanding notes. A run upon the bank began on the night of July 16th, and the crowd was so dense that a dozen unfortunates were choked or trampled under foot. The corpses were placed upon litters and borne to the residence of the Regent. Law escaped from the crowd into the palace, but his carriage was broken in pieces and the coachman thrown from his seat and dragged upon the ground. The bank was closed, the forced legal tender of the bank-bills was suspended, the contracts of the company with the government were cancelled, and the stock was called in for readjustment.

A decree appeared on January 26, 1721, known under the name of the *visa*, providing for the liquidation of the affairs of the company and of the bank and the readjustment of the public debt. The decree was attributed to Paris-Duverney, from whom Law had taken the farming of the revenues, and

was confided to him for execution. The attempt was made to readjust private fortunes as well as public obligations upon the basis which had prevailed before the period of paper inflation which Law had inaugurated. Those who had fled the country with their winnings transmuted into gold, those who could command the royal favor, and those who were able to keep their gains in hiding were the only ones who escaped. The mere transfer of speculative gains into real property did not prevent the exercise of arbitrary power to transfer the property back to its original owners and remit the new owner to his original poverty. A regular scale of readjustment was prepared by which the public debt was reduced to its original volume and the holders of bills and the stock of the company were given new public obligations ranging from one hundred per cent. of their holdings in certain cases down to five per cent., according as they were supposed to represent real values or the profits of stock gambling.

The lesson of Law's disastrous schemes and the painful readjustment which followed them prevented for half a century the creation of any new bank of issue in France. The success of the Bank of England, however, and the necessity of some aid to commerce, led to a futile attempt to found a bank under a decree of the Council of State of January 1, 1767,[1] and the establishment, during the ministry of Turgot, by a decree of March 24, 1776, of the *Caisse d'Escompte du Commerce* (The Bank of Commercial Discount). The new institution was limited to a strictly banking business, and forbidden to borrow except by its notes payable at sight. It was authorized to begin operations with a capital of 15,000,000 livres ($3,000,000), of which it was intended that two-thirds should be loaned to the Treasury. The loan to the Treasury not having been completed as proposed, the capital of the bank was reduced to 12,000,000 livres, repre-

[1] The proposed institution was to be known as the *Caisse d'Escompte* and to have a capital of 60,000,000 livres, but it never entered upon active operations and was suppressed by a decree of March 21, 1769. —Courtois, 84.

sented by four thousand shares of 3000 livres each. Some of the most eminent public men and financiers of Paris served on the board of directors of the bank, and while they were not directly responsible for its management,[1] its note issues were kept within prudent limits and annual dividends were declared for the first six years, ranging from five to eight per cent.

The first blow to the bank's credit came from the demands of the government. The growing social and economic difficulties of France were brought to a climax by the bad crops of 1783 and caused a great scarcity of metallic money. The new bank, after having considerably expanded its commercial discounts, made an advance to the government at the demand of D'Ormesson, of 6,000,000 livres. It was brought face to face with the crisis with a circulation of 45,000,000 livres and with a cash reserve of but little more than 4,000,000. There was a sudden rush for the redemption of the notes and the bank appealed to the Treasury to reimburse the 6,000,000 livres recently loaned. The government was in no condition to comply with this demand, but it was ready to employ its sovereign power to enable the bank to suspend specie payments and to authorize the redemption of bills in commercial paper or their non-payment until January 1, 1784, (Decree of September 27, 1783). The bank was solvent, however, and had the courageous support of the private bankers of Paris, who held a large proportion of its bills. A report presented by the lieutenant of police, M. Le Noir, showed that the bills in circulation, amounting to 44,724,000 livres, were offset by 47,700,000 livres in good commercial paper, 4,121,700 livres in gold and silver coin and bullion, and 6,000,000 livres held by the Treasury,

[1] The bank really constituted a partnership *en commandite*, for which a few individuals were legally responsible, and the use of the names of leading financiers as directors was somewhat akin to the modern fraud of paying men of high station for the use of their names to float irresponsible enterprises; but the practice in this case appears to have grown out of the lack of experience with stock companies and to have involved no intentional deception.

making total assets of 57,821,700 livres and affording a favorable balance of 13,097,700 livres.[1]

The loan to the government was soon repaid, specie payments were resumed under a decree of November 23, 1783, and the bank was authorized to increase its capital to 15,000,000 livres, and for four years it continued to operate free from government interference and with advantage to the business community. Its growing prosperity attracted the attention of Calonne, then Controller General, and he determined to turn it to account for the benefit of the State by requiring the deposit of a guarantee fund with the Treasury. The capital was raised from 15,000,000 to 100,000,000 livres and the net receipts in cash, amounting to 80,000,000 livres, were deposited to the amount of 70,000,000 with the Treasury and 10,000,000 were carried to the reserve. A new run set in in August, 1787, but the directors refused to accept a decree for the suspension of specie payments, which Loménie de Brienne, Chief of the Royal Council of Finance, was preparing, demanded help from the guarantee fund in the possession of the government, and promptly met every obligation.

But the government was sinking into the sloughs of bankruptcy and determined to drag the bank with it, so that there should be no stronger credit than its own to put it to shame. August 18, 1788, appeared a decree authorizing the bank to redeem its bills in part in commercial paper. The decree was unsought and its existence was unknown until it was affixed to the doors of the bank, and the permission to suspend was not embraced by the directors. But Necker, who became Finance Minister on May 25, 1789, continued to insist upon secret loans to the Treasury, and the government and the bank soon became so involved with each other that Necker proposed to transform it into a national bank. The Constituent Assembly had already assumed the power to regulate the bank, as it regulated all the established institutions of France, and ordered it to pay into the Treasury 80,000,000 livres of its bills against a deposit of interest-bearing *assignats*. The bank lost its credit with the business commu-

[1] Noel, I., 90.

nity, the redemption of its notes in *assignats* was decreed in 1790, bank-note issues were forbidden by the law of August 17, 1792, and the institution was suppressed by a decree of the National Convention on August 24, 1793.

The next three years were those of the consummation of the Reign of Terror, the execution of the King and Queen, the fall of Danton and Robespierre, and the restoration of order under the Directory. "What institution of credit," asks M. Horn, "could have braved the tempest which agitated the end of the eighteenth century? What instrument of credit could have maintained itself against the *assignats*, which destroyed alike the notions of value and of money?"[1] But the Saturnalia of fiat money lasted but little longer than in the time of Law. The same sort of enactments,—making the paper money legal tender for debts at its nominal value, fixing maximum prices, punishing those who discredited the assignats in conversation,[2] and inflicting the penalty of death upon those who kept their produce from the market,—quickly ran their course. The *assignats* in circulation amounted on January 1, 1796, to 27,565,237,396 francs, and had increased on September 7, to 45,578,810,040 francs, when they were worth one one-thousandth part of their nominal value. The whole fabric disappeared at a blow when the National Assembly decreed on July 16, 1796, that every one might transact business in whatever money he chose and that the mandates, which had superseded the *assignats*, should be taken only at their current value. The effect of this removal of the restrictions upon the natural laws of money is thus strikingly portrayed by Professor MacLeod:

> No sooner was this great blow struck at the paper currency, of making it pass at its current value, than specie immediately reappeared in circulation. Immense hoards came forth from their hiding places; goods and commodities of all sorts being very cheap from the anxiety of their owners to possess money, caused immense sums to be imported from foreign countries. The exchanges immediately turned

[1] *La Liberté des Banques*, 317.

[2] Courtois, 99.

in favor of France, and in a short time a metallic currency was permanently restored. And during all the terrific wars of Napoleon the metallic standard was always maintained at its full value.[1]

The end of the paper money phrensy saw credit again raising her head and several new banking institutions under way. The first one, founded in 1796, was known as the *Caisse des Comptes Courants* (Bank of Current Accounts), and had a capital of 5,000,000 francs ($1,000,000). The circulation was 20,000,000 francs in bills of 500 and 1000 francs, and bills of exchange running for ninety days were discounted at six per cent.[2] The *Caisse des Comptes Courants* was created largely by bankers for bankers, and a party of business men, to escape what they regarded as a certain degree of favoritism, determined to found a banking association of their own. They established, November 24, 1797, for a term of three years, the *Caisse d'Escompte du Commerce* (Bank of Commercial Discounts), which proved so successful that it was renewed for an unlimited term. There was no fixed capital, but each new subscriber for a share of 10,000 francs ($2000) increased the capital by so much until in less than four years it had reached 12,000,000 francs. Five thousand francs were paid on each share in cash and five thousand francs in bank-bills were endorsed by the subscriber with his own signature and afterwards countersigned by the bank.[3] The plan proved so successful that it was imitated by the retailers, who organized the *Comptoir Commercial* (Commercial Bank). The *Caisse des Comptes Courants* and the *Caisse d'Escompte* accepted reciprocally each others bills and were doing an active and safe banking business when a new turn was given to the economic history of France by the *coup d'état* of the Eighteenth Brumaire (November 9, 1799), which made Napoleon Bonaparte First Consul and virtually the supreme ruler of France.

Bonaparte had hardly grasped power before he turned to his financial advisers for a plan for a national bank. They

[1] *Theory and Practice of Banking*, II., 258.

[2] Courtois, 109.

[3] Horn, 322.

had one ready for his immediate consideration, bearing a striking resemblance to the plan of the Notary Rouen which had been before the Council of Five Hundred under the government of the Directory. Less than three months after the Eighteenth Brumaire appeared the decree of January 18, 1800 (*28 Nivose, An VIII*), constituting the Bank of France, with a capital of 30,000,000 francs in shares of 1000 francs each. The decree provided that one-sixth of the capital should be furnished by the Treasury by an investment of half the funds given as bonds by the receivers general, and Napoleon, members of his family, and personal friends lent their support by subscribing for the shares.[1] This support was necessary to the success of the bank, and it was not until 1802 that all the shares were taken. Vitality was given the institution by the decision of the general assembly of the *Caisse des Comptes Courants* to consolidate with it and the transfer of their offices in the Place des Victoires. February 20, 1800, the bank began its operations as a bank of issue and of discount. It was at the outset a private institution, free from government interference and its right to issue notes was far from exclusive.

But Bonaparte did not view with patience this situation. "One bank is easier to watch than several," was his comment, and after the *Caisse d'Escompte du Commerce* had refused to loan money to the government, he took vigorous measures to drive it to the wall. The law of April 14, 1803 (*24 Germinal, An XI*), gave the Bank of France the exclusive privilege of issuing bank-bills at Paris, raised the capital from 30,000,000 to 45,000,000 francs and decreed that no bank should be established in the departments without the authority of the government. The stockholders of the *Caisse d'Escompte du Commerce* filed an emphatic protest against the abrogation of their right to issue notes. Their complaints did not prevent the passage of the law, but the

[1] Napoleon took thirty shares, Joseph Bonaparte took one share, Murat two, Hortense Beauharnais ten, Duroc five, General Clark, who married Napoleon's sister and died in San Domingo, one, and Bourienne, five.—Noel, I., 97, note.

management of the Bank of France did what they could to prevent a crisis by fusion with existing banks of issue. A consolidation was arranged with the *Caisse d'Escompte du Commerce*, which turned over its assets and received bills of the Bank of France in exchange. The shareholders had the option of becoming shareholders of the Bank of France with all the privileges of the original shareholders.

The financial crisis which broke out upon the formation of the third coalition against France, after the rupture of the Peace of Amiens, resulted in radical changes in the constitution of the Bank of France. The preparations for the campaign of Austerlitz required large expenditures by the government and the syndicate of contractors for supplies for the armies obtained large loans from the bank in the form of bills. The bills began to be presented for redemption at the rate of two or three million francs a week. The coin reserve of the bank was reduced, specie was demanded by the bank in the settlement of its balances with bankers in the departments, and accommodation bills of exchange were largely drawn by the contractors to obtain new loans, with the result of new note issues and new demands for redemption. The circulation, which before 1803 had never exceeded 30,000,000 francs, surpassed 80,000,000 and the bills began to fall below par. The council of the regency limited redemptions to a fixed sum per day, and in course of time the contraction of discounts and the settlement of balances due the bank reestablished equilibrium. The victory of Austerlitz (December 2, 1805) assisted in restoring confidence, and Napoleon, the morning after his return to Paris, summoned a council to discuss the crisis which had absorbed his thoughts even upon the field of battle.[1]

The Emperor was convinced that bad management had much to do with the crisis, and within twenty-four hours of the council M. Mollien succeeded M. de Barbé-Marbois as Minister of the Treasury and was charged with the preparation of a new plan of organization for the bank. He recommended that the bank be linked with the State and that it

[1] Noel, I., 104.

be the only institution in the country authorized to issue credit paper. "The bank," he declared, "does not belong only to its stockholders; it belongs also to the State, since the latter has given it the privilege of creating money." This policy was very pleasing to the Emperor and was promptly put in practice. The law of April 22, 1806, increased the capital of the bank from 45,000,000 to 90,000,000 francs and confided its direction to a governor and two subgovernors named by the head of the State, but paid by the bank. The duration of the privileges of the bank was extended fifteen years beyond the date fixed by the Act of 1803, until September 24, 1843. It was the purpose of Napoleon to make the bank national in its operations as well as in name, and a decree of May 18, 1808, gave the exclusive privilege of note issues to the bank in every town in which it established branches.

The fall of Napoleon caused a temporary suspension of the operations of the bank. The council ordered the burning of the bills which were in the vaults ready for issue and the withdrawal of current accounts by depositors. The reserves fell to 5,000,000 francs ($1,000,000) the circulation to 10,000,000 francs and current accounts to 1,300,000 francs. The prompt return of peace restored confidence, the circulation was increased to 70,000,000 francs and the reserves rose to 93,000,000 francs. The government of the restoration, however, was not especially friendly to the financial creation of the Napoleonic dynasty. The management of the bank themselves were ready to renounce exclusive privileges in the departments, provided the stockholders were allowed to resume the selection of the governor and his assistants. This project was not accepted by the Chambers, but the branches at Rouen and Lyon were abandoned and were succeeded by departmental banks of a type which soon spread to the leading cities of France.

These departmental banks were entirely independent of the Bank of France, and were authorized to issue their own notes. They accommodated themselves to local necessities, their officers were acquainted with local credits, their profits

augmented, and their operation contributed greatly to the development of the industrial activity of the nineteenth century in France. Institutions of this sort were founded in nine principal cities, and some idea of the extent of their operations and of their success may be formed from the following table of the principal items of their balance sheets for 1847 :[1]

BANK.	MEAN COIN RESERVE.	MEAN DISCOUNTS.	MEAN CIRCULATION.	DIVIDENDS.
	Francs.	Francs.	Francs.	Per Cent.
Rouen,	4,500,000	10,100,000	12,000,000	14.4
Nantes,	1,700,000	6,400,000	4,300,000	9.7
Bordeaux,	12,600,000	13,900,000	20,900,000	16.3
Lyon,	10,400,000	23,100,000	19,700,000	28.8
Marseilles,	6,400,000	14,000,000	16,500,000	12.9
Havre,	1,600,000	7,000,000	4,400,000	6.8
Lille,	1,800,000	5,400,000	4,500,000	9.6
Toulouse,	1,600,000	2,400,000	4,800,000	11.7
Orléans,	1,100,000	2,600,000	3,000,000	11.3
Total,	41,700,000	84,900,000	90,100,000	

This exhibit shows a circulation for these nine banks in 1847 of about $17,500,000 secured by a coin reserve of $8,000,000, by means of which loans had been made to the amount of $18,000,000. The large profits obtained by these departmental banks (indicated in the table of dividends) were reflected in the high prices of their capital stock. The shares all had a par value of 1000 francs ($200), and the quotations in 1847 were: Bank of Rouen, 2650 francs; Nantes, 1750 fr.; Bordeaux, 2200 fr.; Lyon, 3770 fr.; Marseilles, 1970 fr.; Havre, 1330 fr.; Lille, 1700 fr.; Toulouse, 1200 fr.; Orléans, 1810 fr. The deposits were comparatively small, amounting at their maximum in 1847 to 16,800,000 francs ($3,250,000). Deposit banking was almost unknown in the smaller cities of France and these departmental banks

[1] This table is compiled from the appendix to Courtois's *Histoire des Banques en France*, 338–41, and is given in round figures because the tables appear there in millions of francs, instead of being fully carried out. The same figures appear in Horn's *La Liberté des Banques*, 361–64.

could never have made substantial dividends or acquired any considerable volume of business without the power to transmute their assets into circulating notes.

The majority of the departmental banks were founded between 1835 and 1840,—the period when the failure of the Bank of France to meet expanding commercial needs began to be most keenly felt. The Bank of France was generally regarded as an institution for bankers rather than for merchants and the latter obtained their discounts at the bank through the intervention of private discount houses. Many of these houses suspended during the political disturbances of 1830, and it became necessary to appoint a royal commission to report upon the commercial and industrial situation and "to propose measures suitable to restore to business transactions and the circulation their usual regularity." The proposition which became law on October 17, 1830, proposed to make loans directly from the Treasury and fixed the amount at 30,000,000 francs ($6,000,000). A discount office (*Comptoir d'Escompte*) was established at Paris with a capital of 1,300,000 francs, which it was authorized to lend at four per cent. on bills upon Paris and at five per cent. on those upon the provinces. Various amounts were afterwards added to the capital and the *comptoir* was continued with the guarantee of the City of Paris until September 30, 1832. The total discounts from December 31, 1830, covered 59,928 pieces of commercial paper amounting to 33,191,433 francs. Similar offices were established in many of the departments and contributed with the direct government loans towards the accommodation of industry. The government commission made loans in Paris for periods of twelve, eighteen, and twenty-four months, distributing them with some reference to the number of laborers employed, and assisted nearly 450 establishments in fifty-three departments outside of Paris, employing more than eighty thousand men.[1] The amount of these loans reported still bad or doubtful in 1870 was 905,312 francs ($180,000).

A similar device was resorted to again after the revolution

[1] Courtois, 137–45.

of 1848. The country was then emerging from the effects of a financial crisis and the discount houses had again lost public confidence. The government on this occasion sought the co-operation of the business community in establishing discount offices. They required that a third of the capital be furnished by individuals or municipalities, the other two thirds being represented by Treasury bonds and municipal obligations. Some of the offices received in addition a loan in specie, upon which they were required to pay four per cent. interest to the Treasury. Most of these loans were reimbursed at the end of two years and several of the discount offices afterwards repaid the capital advanced by the State and became private banks. The Paris office became the *Comptoir d'Escompte*, which established branches in India, Japan, and the Antilles,[1] and carried on some large operations in finance. It was wrecked by advances of 130,000,000 francs to the great copper syndicate in 1888, and its ruin was proclaimed by the suicide of the director, M. Denfert-Rochereau, on March 5, 1889.[2] The Bank of France was compelled from 1848 to 1852 to make many renewals of its discounts, but the amount thus outstanding was reduced on December 31, 1856, to 772,500 francs ($150,000).[3]

The success of the departmental banks was already so great before 1840 that the Bank of France was stimulated to avail itself again of the right to establish branches in the leading cities of the country and a contest which has not yet ended arose among bankers and economists as to the relative wisdom of granting a monopoly of note issues to a single institution or permitting such issues by local banks. The advocates of monopoly won a partial triumph by the Act of June 30, 1840, which prolonged the privileges of the Bank of France until December 31, 1867, and declared that no departmental bank should thenceforth be established, nor the privileges of existing banks prolonged, except by virtue of a special law. The ordinance of March 25, 1841, which

[1] Courcelle-Seneuil, 194.

[2] Jannet, 325–26.

[3] Courtois, 178–187.

fixed the status of the branches, is the law still in force, and gave to the branches the exclusive privilege of issuing notes in the cities where they were established. Even the increase in the number of the departmental banks and in the branches of the Bank of France had not been adequate to supply the growing demand for discounts, and in 1837 Jacques Laffitte founded the *Caisse Générale du Commerce et de l'Industrie* (General Bank of Commerce and Industry),[1] with a capital of 15,000,000 francs. The absence of authority to issue circulating notes was evaded by the issue of bills payable to order after five, fifteen, and thirty days, with interest, and for three months without interest. The bills payable after five days were the most sought for and were circulated with an indorsement in blank which permitted them to pass from hand to hand.

The overthrow of the government of Louis Philippe in February, 1848, came on the heels of the financial crisis of 1847, and the combination of the two events caused a long list of failures and the general suspension of specie payments by authority of the provisional government. The suspension of specie payments was accompanied by decrees giving forced legal tender character to bank-notes, both those issued by the Bank of France and those issued by departmental banks,[2] but legal tender circulation was given the notes of the departmental banks only within the departments

[1] The Bank of France was unwilling that the name *Banque* should be assumed by any other institutions than itself and the departmental banks. There was no law on the subject, as in England and the United States, but the object was attained by the suggestion that cordial relations would not be established with the new institution if it called itself a bank.—Courtois, 155, note.

[2] The opponents of monopoly lay stress upon the fact that the Bank of France was forced first to seek the suspension of specie payments, and it was not until ten days later (March 25, 1848) that the same privilege was extended to the departmental banks, which had thus far steadily met all demands. The circulation of the Bank of France was fixed by legal decree at a maximum of 350,000,000 francs ($70,000,000) and limits were fixed for each of the departmental banks, amounting to an aggregrate of 102,000,000 francs ($20,400,000).—Horn, 368–70.

in which they were established. This policy, whether intentionally or not, paralyzed the action of the independent banks and gave a color of justification for the decrees of April 27 and May 2, 1848, providing for the fusion of the departmental banks with the Bank of France and limiting the issue of bills to the central institution and its branches. The language of the decree based the consolidation upon the ground "that the bills of the departmental banks form in certain localities special monetary signs, whose existence injects a deplorable perturbation into all transactions; and that the essential interests of the country imperiously demand that every bank-bill declared to be legal money shall be able to circulate equally in all parts of the land."[1] The government thus touched upon the weakest feature of the departmental system—the lack of interchangeability of the various note issues. This was in part the result of the government's own action in limiting the legal tender quality of the notes, but it was also true that there was no association among the banks which might have kept their notes in circulation without the legal tender quality.[2] The Bank of France was given the aggregate circulation of the pre-existing banks and the maximum was raised by decree of December 22, 1849, to 525,000,000 francs.

The fusion of the departmental banks with the Bank of France resulted in an increase of the capital of the central institution by the exact amount of the capital of the nine departmental banks. The capital of the central bank had been reduced in 1823 by the purchase of outstanding shares to 67,900,000 francs and was increased by the absorption of the departmental banks to 91,250,000 francs ($18,000,000). So strongly did the current of centralization run that it was proposed to unite the bank to the public domain under the name of the National Bank of France, but the Assembly was unwilling to increase the distrust already felt in business circles by so radical a departure and rejected the proposals.[3]

[1] *Lois et Statuts*, 67–68.

[2] Courtois, 175–6.

[3] Noel, I., 114.

The forced legal tender of the bills came to an end by the law of August 6, 1850. A new increase of capital was made by the law of the Empire of June 9, 1857, and the charter of the bank was extended to December 31, 1897. Its existing privileges were confirmed and a concession was made to the recent growth of economic opinion, in favor of controlling the foreign exchanges through the discount rate, by exempting the bank from the usury laws.[1] The new charter required that branches be established within ten years in all the departments, but it was not until fifteen years after the time set that this requirement was fully complied with. The increase of capital was justified by the immense expansion of industry by machinery and the building of railroads, and the requirement of a branch in every department made it the more imperative. The capital was therefore doubled and the 91,250 new shares were issued at 1100 francs, of which the premium of 100 francs was destined to strengthen the reserve. The government borrowed 100,000,000 francs of the money subscribed for the increase of capital upon a pledge of three per cent. securities.

The strength of the bank proved a powerful support for the railway enterprises which were now being floated in nearly every department. The quotation of the stock of the new companies, which had not yet had time to complete their lines, had fallen very low when ten of the leading companies formed a syndicate and appealed to the bank for assistance. A contract was signed by which the bank opened a credit in favor of the companies on the deposit of their obligations and agreed to market them under favorable conditions. Two hundred and forty million of francs ($46,300,000) of obligations were disposed of, 150,000,000 by private sales and 90,000,000 by public subscription, during 1858, and the quotations were carried upward from 260 francs to 290 francs within the year. The only benefit derived by the bank from this operation was the interest on the advances

[1] *Lois et Statuts*, 81. The earnings above six per cent. were required to be carried to a permanent surplus fund, which stood for more than twenty years at 8,002,313 francs.

to the companies, which amounted to 449,600 francs, but the operation was so successful that sales through the agency of the bank were continued in 1859 and the bank charged a commission of 50 centimes for each obligation sold, deriving a premium of 440,000 francs from the transaction. Similar operations were continued for several years, with handsome profits to the bank and great benefit to the railways in placing their obligations and obtaining the necessary capital for construction.

The history of the Bank of France since 1870 is deeply colored by the national struggle with Germany. The bank lent its support to the government at the outset; it received the privilege of legal tender for its notes and the suspension of specie payments; it suffered from the ravages of the Commune, and it played a large part in the settlement of the great war indemnity. The management of the bank was prudent, and its credit suffered but slight impairment under the strain of national disaster and civil discord. The bank advanced 50,000,000 francs to the government on July 18, 1870, four days after hostilities were voted, secured by Treasury bonds running for three months. Other advances up to the close of the war carried the total to 1,470,000,000 francs ($280,000,000). The suspension of specie payments was authorized on August 12th, with only one dissenting vote in the Chamber of Deputies. This step was not taken at the request of the bank, or because of any severe pressure upon it for gold, but with the view of tying up the gold reserve for the benefit of the government in case of military necessity.[1]

The restoration of specie payments in 1850 had been accompanied by the removal of any limitation upon note issues, which had gradually expanded with increasing commercial development to 1,439,000,000 francs ($275,000,000) in 1869. A limit of 1,800,000,000 francs was imposed by the law of August 12, 1870, which was raised two days later to 2,400,000,000 francs. Gold jumped to a premium of one and one half per cent.. but the premium fell in a few days to

[1] Courtois, 258.

one per cent. or even less and did not rise materially, in spite of the disasters of the army, until the great demand for foreign exchange in paying the war indemnity. The premium then rose as high as two and a half per cent, representing apparently one of the few cases where the price of gold has risen as the result of a special demand without affecting the prices of commodities or the credit of the paper circulation. The necessity of a large circulating medium led to a further extension of the limit of issue on December 29, 1871, to 2,800,000,000 francs, and the great loan of three milliards was the occasion for another extension, July 15, 1872, to 3,200,000,000 francs. The law of December 29, 1871, authorized the issue of notes for five francs and ten francs. The limit of circulation was not again raised until after the resumption of specie payments. Resumption was set by the law of August 3, 1875, for the time when the debt of the government to the bank should be reduced to 300,000,000 francs. This condition was formally complied with by a payment to the bank of 10,000,000 francs on December 31, 1877, but the bank had already been paying five-franc pieces in silver since November 7, 1873, and twenty-franc gold pieces since November, 1874.[1]

The Bank of France was saved from complete destruction during the reign of the Commune in Paris, in the spring of 1871, by appeasing with small sums the appetites of the hungry Communist leaders. The latter first drew out in instalments the sum of 9,401,819 francs, which was on deposit to the credit of the City of Paris, and when this was exhausted demanded several millions more. The bank yielded grudgingly under the compulsion of force and with the approval of the Ministry of Finance at Versailles. The Communists, after the capture of one of the gates of Paris by the regular army on May 22d, set fire to the Tuileries and sent one of their officers to the bank to demand the immediate payment of 700,000 francs for the wages of the National Guard. The Marquis de Plœuc, the Assistant Governor, temporized as far as possible by advancing 200,000 francs

[1] Arnauné, 429.

and refusing the remainder upon the ground that so large an advance required the consent of the Council of Regents of the bank. The refusal exasperated the Communist leaders, who threatened to bring the bank to terms by two battalions and two pieces of cannon. The bank yielded, upon the written demand of the Committee of Public Safety, endorsed by M. Jourde, the financial delegate of the Commune, that "If this sum is not delivered, the bank will be immediately invaded by the Communal Guard."[1] M. Jourde was obliging enough, when a new demand was made for 500,000 francs on May 23d, to deliver a receipt endorsed with the declaration that "The refusal of this sum would involve the seizure of the bank." The next day the regular army of Versailles was in the heart of Paris and the bank was safe from further robbery. The advances on behalf of the City of Paris were recognized as a debt of the city and counted into the loan for 210,000,000 francs contracted with the bank on August 30, 1871. The bank was less successful with the general government and, after a long course of negotiations, was obliged to charge 7,293,383 francs to the account of profit and loss.[2]

The Bank of France played an important part in the most remarkable transaction in the history of foreign exchange—the payment of the great war indemnity levied upon France by Germany. A detailed account of the process of payment was submitted to the National Assembly in 1875 by M. Léon Say, and forms one of the most instructive chapters of modern financial history. The definitive treaty of peace, signed at Frankfort on May 10, 1871, called for the payment by France to Germany of five milliards of francs ($1,000,000,000). Five hundred millions were to be paid thirty days after the restoration of order in Paris, one thousand millions during the year 1871, five hundred millions on May 1, 1872, and three thousand millions on March 2, 1874, with five per cent. interest on the last payment. The framers of the treaty appreciated the difficulty of making such an immense

[1] Noel, I., 122.

[2] Noel, I., 200.

transfer of credit without upsetting the financial fabric of Europe and provision was made that payment might be made in gold or silver, in notes of the banks of England, Prussia, Holland, or Belgium, or in first class bills of exchange. Bills not payable in Germany were to be valued at their net proceeds after deducting the cost of collection. It was afterwards agreed that the portion of the Eastern Railway of France which was situated in the ceded province of Alsace, and was the property of the French government, should be accepted for 325,000,000 francs of the indemnity, and that 125,000,000 francs should be received in notes of the Bank of France.

Three things had to be accomplished in order to pay the indemnity within the time set. The credits had to be transferred to the French government by taxation or the sale of securities; the proceeds had to be converted into obligations acceptable to the German government; and these obligations had to be paid or transferred to the credit of Germany. The first step was taken by means of an advance from the Bank of France and the placing of public loans. The bank advanced 1,530,000,000 francs ($300,000,000) to enable the government to meet promptly the two payments required during 1871. One of the conditions of the payment of the indemnity was that German troops should occupy French soil until the payments were completed. M. Thiers, the president of the new republic, determined to free the country from foreign occupation at the earliest possible moment by anticipating the payments. Two loans were authorized, —one for 2,225,994,045 francs ($430,000,000) in the summer of 1871, and one of 3,498,744,639 francs ($675,000,000) in the summer of 1872. They were subscribed many times over and the government thereby obtained the funds for completing the payments and liberating French soil in the summer of 1873.

One of the striking results of this loan was to bring from the hoards of the French peasants and small shop-keepers the gold and silver which had been accumulating for generations. It was the initiation of whole classes of the French

people into dealing with negotiable securities. The time was nearly ripe in the progress of modern financiering for this change in the habits of the people, but it required a loan which appealed to their patriotism and carried a high guarantee of safety to definitely break down the old habit of hoarding and establish the new habit of investment.[1] The subscriptions to the second loan were 934,276, and the amount subscribed was 13,252,455,930 francs at Paris, 4,513,445,566 francs in the provinces, and 26,050,195,054 francs in foreign countries. The foreign subscriptions, numbering 107,612, were largely speculative and the majority were made by the great financial houses as a means of supporting their correspondents in Paris. The bulk of the loan tended eventually into the hands of Frenchmen. The hoards of gold and silver brought into the market from the provincial subscribers went to swell the monetary circulation and enabled the Bank of France within a few years to accumulate a coin reserve nearly twice as large as it had ever before held. While 375,000,000 francs ($73,000,000) in gold left the country in the three years 1871–73 and the reserve of the Bank of France declined as low in 1871 as 399,000,000 francs, the yellow metal came pouring back in the next few years, and in 1876 the reserve of gold alone in the bank stood at 1,530,400,000 francs ($300,000,000).

Another striking feature of the payment of the war indemnity was the development of the use of commercial credit for transferring funds from one country to another.

[1] M. Leroy-Beaulieu computes an increase in French fund-holders from 550,000 in 1870 to 1,000,000 in 1876, counting only permanent investors and excluding speculative holdings. This would represent about one in eight of the heads of families in France. The sales of public securities in the departments increased from 4,299,425 in 1869 to 24,272,094 in 1873.—*La Science des Finances*, II., 220–25. The effect of the popular subscriptions may be traced also in the reduction of the balances in the *Caisse d'Épargne* (Savings Bank) of Paris, which fell from 54,180,747 francs ($10,500,000) on January 1, 1870, to 35,454,124 francs ($7,000,000)on January 1, 1873, the latter being the lowest point reached since 1850.—*Vide Bulletin de Statistique*, Oct., 1895, XXXVIII., 374–77.

The aggregate payments consisted of only 742,334,079 francs ($143,000,000) in all forms of currency, including bank-notes, and 4,248,326,374 francs ($820,000,000) in bills of exchange. The loss in the monetary circulation of France was less than the sum of coin and bank-notes, because some of the bank-notes were purchased by exchange in foreign countries and others were German notes which had drifted into France with the German army. The real specie payments were 273,003,058 francs ($52,600,000) in French gold and 239,291,875 francs ($46,000,000) in French silver. The essential work of completing the payments was done by the purchase by the government of bills of exchange drawn by Frenchmen upon their credits in every quarter of the world. British bills were the most plentiful upon the Paris market and the heavy purchases of the French government threw much of the monetary stress upon England and compelled the Bank of England to maintain high discount rates all through 1872 and 1873.[1] The purchase by the government of a bill drawn by a French merchant upon an English customer permitted the transmission of the bill to the German government, which could then draw upon London for the gold or simply direct the deposit of the proceeds to their credit in the London Joint Stock Bank, which was their London agent. If the Frenchman who sold his bill of exchange to the government was a purchaser of the new public loan, the result of the process was the transformation of his claim against his English customer into a claim against his own government.

One of the incidents of this great operation in exchange was the fall in the price of foreign securities on the Paris market and their flight to other countries, where their quotations remained comparatively undisturbed. These influences operated most directly upon what are known on the European exchanges as "international securities," because they are known and quoted in the leading markets of the world. The cause of their decline on the Paris market in 1871 was the eagerness of Frenchmen to transfer their capi-

[1] Gilbart, II., 349.

tal into the obligations of their own country. The result of the decline was not only the sale of the securities offered to brokers, but a flood of foreign money and foreign credits to Paris to take advantage of the reduced prices of "the internationals." M. Say, in his report, attributed to these arbitrage transactions in international stocks and their coupons much of the facility with which the indemnity was paid. The sales of Italian five per cent. securities alone on the Paris Bourse from July 1, 1871, to December 31, 1873, were 46,115,000 francs ($9,000,000), not including sales by private brokers. The proof that these sales were largely on foreign account was furnished by the decline in the interest payments made at Paris on Italian securities from 40,150,000 francs on July 1,1871, to 25,604,000 francs on January 1, 1874.[1]

The Bank of France was embarrassed as early as 1860 by the fluctuations in the relative value of gold and silver and their departure from the ratio of fifteen and a half to one fixed by the French coinage law of 1803. Silver had become the more valuable metal, because of the immense addition to the gold stock by the discoveries in California and Australia. The value of silver, in other words, was greater in proportion to gold than the price paid for bullion at the mint. It was obvious that if the bank continued the policy of redemption of its notes in gold or silver at the option of the holder, silver coin would always be preferred, and would be withdrawn for speculative purposes as long as it could be obtained, because it could be sold as bullion at a profit above its face value in gold. The situation became so serious that the bank asserted the option to pay only in gold and was obliged to borrow that metal from the Bank of England in order to be well supplied. Gold had been flowing into France since the opening of the California mines and silver

[1] Leroy-Beaulieu, II., 236. M. Leroy-Beaulieu admits that sales for *report* are included in the first item, but the decline in interest payments at Paris seems to sustain his argument that Italian securities left France in order that their proceeds might be invested in the indemnity loan.

flowing out in an uninterrupted stream,[1] but the Bank of France had held on to the dearer metal, silver, and redeemed in the cheaper until its gold reserve was reduced in 1860 to about 100,000,000 francs, while its silver stood at about 325,000,000 francs. About £2,000,000 in gold was obtained from the Bank of England, which was not averse to exchanging the less valuable metal for the dearer, even though the latter was not a money metal in England.

The departure of the market ratio of gold and silver from the mint ratio by the depreciation of gold was the occasion of the formation of the Latin Union. Belgium, Italy, and Switzerland had already adopted the French decimal system of coinage before the formation of the Union, and the coins of each country circulated freely in the others. The proposition for a conference came from Belgium, but was cordially accepted by the French government and the meeting called at Paris. The most pressing problem to be confronted was the disappearance of the subsidiary silver coins because of the premium upon silver. Switzerland had already reduced her silver coins, except the five-franc piece, by the law of January 31, 1860, from nine-tenths fine to eight-tenths; Italy, by the law of August 24, 1862, had lowered to 0.835 fine the franc and smaller pieces; and France had adopted the standard of 0.835 for her pieces of 20 and 50 centimes. The change of all but the five-franc piece was recommended by a commission appointed by the French government in 1861, but the Corps Legislatif in passing the law of May 25, 1864, refused to reduce the one- and two-franc pieces.[2] Belgium was on the point of taking legislative action when the advantages of an international conference suggested themselves.

The refusal of the French legislative body to reduce the fineness of the larger silver pieces, so as to bring their bullion

[1] The net imports of gold into France from 1848 to 1870 were 5,153,000,000 francs ($1,000,000,000) and only one year (1861) showed net exports. The years 1852 to 1864 showed uninterrupted net exports of silver amounting to 1,726,000,000 francs ($340,000,000).—Shaw, 184–86.

[2] Arnauné, 227.

value down to their face value, was rapidly driving them out of circulation and silver had long ceased to be offered in any considerable quantities for coinage at the mints.[1] The conference decided that all silver coins below the five-franc piece should be reduced to 0.835 fine, that their coinage should be limited in each country to six francs per capita, that the subsidiary silver should be received in the public depositaries of each country in amounts not exceeding one hundred francs ($19.30) and should be a legal tender in the country where coined in amounts of not more than fifty francs ($9.65). The Belgian, Swiss, and Italian delegates strongly urged the adoption of the single gold standard, but the proposition was resisted by the French delegates and was not acted upon. The convention putting in effect the decisions reached in the conference was adopted on December 23, 1865, and Greece soon after became a party to it. A monetary conference was held at Paris in connection with the international exposition, which recommended the adoption of the gold standard by the countries taking part, and it was in pursuance of this action that the French government concluded the preliminary convention of July 31, 1867, with Austria, establishing a fixed relation between the franc and the gold florin.[2]

The formation of the Latin Union, so generally treated today as a plan to maintain bimetallism, was, in the language of a high authority, "a measure of defence against the action of the bimetallic system in those countries which had adopted the monetary system of France, and lay exposed to all its disastrous fluctuations."[3] The effect of the action of the countries forming the Union, in the language of the French monetary commission of 1867, "places in the front rank gold money, and reduces the pieces of silver of two francs and less to the rôle of token money. It therefore

[1] The total coinage of silver at the French mint in 1863 was 329,610 francs ($65,000), while the gold coinage was 210,230,640 francs ($41,000,000). The largest silver coinage since 1856 had been 8,663,568 francs in 1858, and the largest gold coinage 702,697,790 francs in 1859.

[2] *Vide* Ch. viii. and ix.

[3] Shaw, 190

definitely determines the ascendency of the gold franc and solves practical difficulties arising from the double standard." The Latin Union, so far from establishing bimetallism, adopted the gold franc as the standard because gold was then the money of general circulation within the countries of the Union. The mints continued open to the free coinage of both metals, but silver was not offered on private account for coinage into five-franc pieces at the legal ratio, any more than gold would be offered at the present day in a country where silver at the old ratio was the common medium of circulation.

It was because the ratio tilted backwards to a higher bullion value for gold and a declining value for silver that the aspect of the monetary problem was reversed and that the purpose of the Latin Union has come to be misunderstood. The members of the union from the outset, however, have done no more than seek to maintain the circulation of silver by limiting its coinage. Silver first dropped below par in 1867, when the commercial ratio of gold to silver was 1 to 15.57, but it was not until 1873, when the quotation was 1 to 15.92,[1] that it began to be noticed that an excessive quantity of silver was being minted and that gold was disappearing from circulation. The problem was complicated by the fact that France, Italy, and Greece were under the *régime* of paper money, leaving only Belgium and Switzerland in full enjoyment of the bimetallic coinage system. The latter

[1] The statement of these differences in the terms of the ratio makes them look much more trifling than is really the case. Stated in terms of percentage, the depreciation of silver in 1867 was a little less than one-half of one per cent. (0.45) and in 1873 was 2.7 per cent. of the par value. The depreciation in 1872 was 0.97 per cent. It is interesting to note that the changes prior to 1873 took place, and that their effect was visible in the bullion offerings at the mints, before the adoption of the gold standard in Germany or the United States or the limitation of coinage by the Latin Union. The depreciation of nearly one per cent. in 1872 was sufficient to afford a large profit on bullion operations, in view of the fact that the usual element in such computations—the time consumed in earning interest—did not need to be considered.

country, with a keen appreciation of actual conditions, almost entirely suspended silver coinage and received her circulation from the other countries of the union.[1] The presentation of gold for coinage at the French mints ceased during 1872 and 1873, and the silver coinage was 26,838,369 francs in the former and 156,270,160 francs in the latter year. The mint of Belgium was besieged by the owners of silver bullion and 111,000,000 francs in five-franc pieces were coined in 1873, while even Italy, though on a paper basis, coined 42,000,000 lires, which were refused acceptance by the Bank of France.[2]

The limitation of the coinage was resorted to for the four years ending with 1877 as the only means of averting the single silver standard. Conferences were held annually and the maximum coinage of five-franc pieces was fixed for each country. The aggregate of these allowances for the four years was 45,200,000 francs for Belgium, 216,000,000 francs for France, 18,000,000 francs for Greece, 164,000,000 francs for Italy, and 28,800,000 francs for Switzerland. Italy was allowed to coin 29,000,000 francs in 1878 and 1879, on condition that the sum should be retained in the Bank of Italy as a metallic reserve against the circulating paper money. Silver continued to fall in price and the policy of limitation was succeeded in 1878 by the policy of absolute suspension of the coinage of five-franc pieces. The monetary union was renewed from 1878 to January 1, 1886, and was extended in 1885 to January 1, 1891, since when it has been prolonged annually by mutual agreement. The convention of 1885 not only bound each of the contracting parties not to resume the coinage of five-franc pieces without the consent of the union, but provided that if such coinage should be resumed the coins should be redeemable by the nation coining them in gold on demand, and that if such

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[1] Her entire coinage of five-franc pieces, from the first limitation to the final suspension of silver coinage, was only 7,978,000 francs ($1,500,000).—Haupt, 85–86.

[2] Arnauné, 231.

redemption should be refused the coins might be refused by the public depositaries of the other parties to the union.[1]

It was such conditions which confronted the Bank of France when it prepared to resume specie payments in 1877 with a gold reserve of 1,202,400,000 francs ($232,000,000) and a silver reserve of 860,900,000 francs ($165,000,000). The situation was exactly the same as in 1860, except that the position of the two metals was reversed. The bank found itself well stocked with the more valuable metal, but restrained from using it for redemption purposes because of the certainty that it would soon be drawn away and sold as bullion. The policy was adopted, and has been steadily adhered to, of redeeming in gold or silver at the discretion of the bank and charging a premium for gold. It is impossible to obtain gold at the bank in the quantity desired for exportation and it has to be taken from the domestic circulation. This means of protecting its gold reserve has been treated by the bank in some measure as a substitute for raising the rate of discount in a monetary pressure and while it protects the gold of the bank it has none of the advantages upon the money market which follow the different policy of the Bank of England. The bullion shippers were shrewd enough when discount was low and gold at a premium in 1857, to draw gold by discounting accommodation bills at the bank rate of four per cent. and selling the gold for the premium for exportation. The bank prevents this under its present practice by paying for discounted paper in silver, which is not exportable for monetary purposes. The result,—"to defend the reserve of the bank to the detriment of the reserve of the country," in the language of M. Arnauné—"is an error which may have melancholy consequences."[2]

The excessive quantity of silver in the reserve of the bank has contributed in a measure to its large note circulation. The bank has tried to force silver five-franc pieces into cir-

[1] For the arrangements regarding the liquidation in gold of the excess of foreign silver coins in France, see Chapter xi., under the Bank of Belgium.

[2] *La Monnaie, le Crédit, et le Change*, 492.

culation, but they have drifted as steadily back upon its hands as standard silver dollars, in spite of the efforts of Treasurer Jordan, drifted back into the Treasury of the United States in 1885 and 1886. People have preferred to take notes resting upon the security of both the gold and silver in the bank reserves. The bank, in the language of an eminent Scotch financier, has had to "relieve the public of £50,000,000 of silver, which was coined, and was in excess of the silver required for the purposes of the people."[1] The government proposed the removal of the limit on circulation in 1884 and while this was refused, the maximum was carried up by the law of January 30, 1884, from 3,200,000,000 francs to 3,500,000,000 francs. The actual circulation at this time was 3,162,000,000 francs, but it continued to rise in response to the demand of the public for notes. The excess of notes in circulation over gold and silver was 1,210,000 francs in 1884 and was reduced in 1893 to 695,000,000 francs, while the circulation had climbed upwards on January 12, 1893, to 3,473,000,000 francs. Another extension of the legal limit was demanded for the accommodation of commerce and it was carried upward by the law of January 25, 1893, to 4,000,000,000 francs. It was found necessary in the extension of the charter in 1897 to advance the limit to 5,000,000,000 francs and again by a law of February 9, 1906, to 5,800,000,000 francs.[2]

The Bank of France faced a serious problem at the close of the nineteenth century in the struggle over the renewal of its charter. The renewal was proposed in 1891, but the opposition was so strong in the Chambers that the bill for the purpose was withdrawn by the ministry for fear of defeat. The bank then pursued a Fabian policy, awaiting the near approach of the expiration of the charter at the close of 1897, in the apparent belief that opposition would be silenced in

[1] Mr. Charles Gairdner, manager of the Union Bank of Scotland, before the Indian Currency Committee. Sen. Misc. Doc. 23, 52d Cong., 1st Sess., 150.

[2] *Bulletin de Statistique*, February, 1906, LIX., 119.

a measure by the lack of time for framing a workable project for a new institution. The new charter was laid before the Chamber of Deputies on October 31, 1896, and was referred to a committee of twenty-two for examination. This committee did not report until winter and their report was not taken up for consideration in the Chamber until May 15, 1897. The bill passed the Chamber on July 1, by a vote of 419 to 97,[1] and went to the Senate, where it was passed at the October session and became a law on November 17, 1897. The vote upon the passage of the bill in the Chamber of Deputies did not indicate the full strength of the opposition to the charter. The proposition to convert the bank into a state institution was rejected by a vote of 118 to 422, but the proposition that the bank should provide capital for an agricultural bank to the amount of 60,000,000 francs was rejected only by a vote of 287 against 258.

The new charter, which was not greatly changed from the form in which it was submitted by the government, extended the privileges of the bank until December 31, 1920, subject to the power of termination by the Chambers on December 31, 1912, if they should see fit to so vote during the year 1911. The essential features of the old charter were not changed, but the limit of circulation was increased to 5,000,000,000 francs, the bank renounced interest upon two existing loans to the government amounting to 140,000,000 francs, and made a further advance to the government of 40,000,000 francs free of interest. These renunciations of interest are offset by the fact that the government carries in its current account at the bank a sum which is usually equal to the amount of these loans. The bank was required to create at least one new auxiliary bureau each year up to the number of fifteen. The most important of the new obligations imposed upon the bank was the payment of a tax equal to one-eighth of the rate of discount upon that portion of the circulation which exceeds the metallic reserve. This tax

[1] *Économiste Européen*, July 2, 1897, XII., 15.

was never to be less than 2,000,000 francs ($400,000) per year.[1]

The Bank of France enjoys the advantage of an ownership and credit independent of that of the government, in spite of the close official supervision which is exercised over it. This financial independence proved as useful to the country midst national disasters and changes of government in 1870–71 as dependence upon the government proved dangerous during the similar changes of 1814–15. The bank was able to assist the government by advances when its own arms were paralyzed.[2] None of the 182,500,000 francs of the bank capital are owned by the State, but the government since 1806 has had a share in the management through the appointment of the governor and two deputy governors, removable at the will of the Minister of Finance. The bank receives the public monies on deposit and performs other public services free of charge, but does not act as an agent of the State to the same extent as many other European banks. By the charter of 1897, the duty was imposed upon the bank of paying coupons of the public debt and issuing new loans.[3]

The governing board of the bank is a general council, which consists of fifteen regents and three inspectors or auditors (*censeurs*). The members are elected at a general meeting of the stockholders, but three of the regents must be selected from the treasury disbursing agents, and three inspectors and five regents must be chosen from among the business portion of the shareholders.[4] The only shareholders entitled to participate in the annual meetings in January are the two hundred who hold the largest number of shares, and at the present value of the shares no shareholder worth much less than 500,000 francs ($100,000) is able

[1] *Bulletin de Statistique*, December, 1897, XLII., 582.

[2] Noel, I., 240. M. Thiers summed up one of the lessons of sound banking in a sentence: "The bank saved us because it was not a bank of state."

[3] Pommier, 329.

[4] *Lois et Statuts*, Art. 9, loi du 22 Avril, 1806.

to participate.[1] A full statement of operations is furnished by the bank to the government every six months and a balance sheet is published in the official journal every Friday.

The governor and deputy governors of the bank are the direct representatives of the State, and most of the measures taken by the bank are taken on their initiative. It is from them that proposals usually come for raising or lowering the rate of interest. It was declared by M. Rouland, who was governor at the time of the official inquiry of 1865, that "nothing of any description which concerns the great interest of the public, nothing which concerns the larger duties which the bank has to perform towards commerce and industry,—nothing of all that class of business is left to the discretion of what is called the interested party." He intimated that it had not perhaps happened twice in sixty-two years that the proposal to change the rate of discount had come from the council.[2] The bank has had only thirteen governors since 1806, several of these serving only *ad interim.*

The most important functions of the Bank of France concern the issue of bank-notes. This is plain from the fact that of its liabilities of 6,987,955,990 francs at the close of 1913, the sum of 5,713,551,290 francs represented outstanding notes, while on the other side of the account the assets included coin and bullion to the amount of 4,157,454,629

[1] Neymarck, 15. This provision has been the subject of much criticism in connection with the renewal of the charter and it has been pointed out that the bank is the only one of the great European institutions where the number entitled to vote in the general meetings of the shareholders is thus definitely limited. A minimum number of shares is the usual qualification, being only one in the Imperial Bank of Germany, five in Holland and Servia, ten in Belgium, fifteen in Italy, twenty in Austria-Hungary, and fifty in Spain.—Noel, I., 222.

[2] Palgrave, 147. It is declared by Fachan that this mixed system gives satisfaction both to those who wish to withdraw from the manipulations of the State the accumulated resources of a private bank, constituting individual property, and those who believe that the right to issue notes is so dangerous that the manner of its use and the prevention of abuses of it should be under state regulation.—*Historique de la Rente Française*, 259.

francs. Commercial paper represented only 1,526,383,115 francs and advances on securities 742,442,772 francs. To a large extent the function of the bank is that of rediscount. It performs this function even for paper representing very small transactions and has in this field done much to benefit small producers and shop-keepers. Thus during the year 1913, at Paris alone, the number of pieces of paper discounted by the bank was 9,056,424, and of these 4,563,306 were for 100 francs ($19.30) or less. The number of pieces for these small amounts discounted at Paris in 1881 was 1,160,495; in 1894, 2,188,957; and in 1907, 3,646,229. The total number of pieces discounted at all offices was 30,041,247. The average maturity of paper discounted, which in 1912 was 25.45 days, rose in 1913 to 30 days.[1]

The discounts given in the following table of the principal items of the bank's accounts, from the official reports to the government, represent the aggregate of the bills discounted during the year rather than the amount outstanding on any given date:

YEAR.	MEAN CIRCULATION.	MEAN METALLIC RESERVE.	TOTAL DISCOUNTS.	MEAN DISCOUNT RATE.
	(In millions of francs)			
1845	268.8	271.2	1,399.3	4.00
1848	347.8	176.2	1,537.4	4.00
1850	495.5	457.8	1,171.0	4.00
1855	644.4	340.5	3,765.2	4.44
1860	736.4	513.5	9,964.7	3.63
1865	843.8	439.6	6,030.2	3.72
1870	1,566.4	1,130.7	6,627.3	3.99
1875	2,464.9	1,541.1	6,826.7	4.00
1880	2,311.4	1,974.4	8,696.8	2.81
1885	2,891.6	2,150.7	9,250.1	3.00
1890	3,076.6	2,476.7	9,549.7	3.00
1892	3,186.3	2,785.3	8,415.7	2.50
1893	3,423.0	2,895.3	8,922.2	2.50
1894	3,495.0	3,127.7	8,725.6	2.50
1895[2]	3,473.0	3,184.9	8,621.9	2.20
1896	3,629.0	3,139.5	9,924.6	2.00

[1] *Assemblée Générale des Actionnaires*, 1914, 13.

[2] From 1895 the figures of the metallic reserve, instead of the mean, are the figures of the end of the year, as better representing the progression from year to year.

YEAR.	MEAN CIRCULATION.	MEAN METALLIC RESERVE.	TOTAL DISCOUNTS.	MEAN DISCOUNT RATE.
	(In millions of francs)			
1898	3,742.0	3,023.9	11,032.0	2.20
1900	4,034.1	3,433.8	12,247.5	3.23
1902	4,162.0	3,650.3	9,555.8	3.00
1903	4,310.0	3,486.0	11,684.9	3.00
1905	4,408.2	3,975.6	10,967.5	3.00
1907	4,800.4	3,615.3	15,769.1	3.45
1910	5,197.7	4,262.0	14,580.7	3.00
1913	5,665.3	3,972.1	20,005.6	4.00

The discount policy of the Bank of France has been as conservative as its administrative policy. While the average rate has been very close to that of the Bank of England, or about 3.60 per cent. from 1844 to 1900, the changes have been much less frequent and advances in the rate have been much less radical in periods of stringency. During the period from 1844 to 1900, the Bank of England altered its rate four hundred times; the Bank of France altered its rate 111 times. Nor has the tendency of recent years been less favorable to the conservatism of the French bank. From 1890 to 1900 inclusive, the changes at the English institution were sixty-six; at the French, nine.[1] During the earlier years of the history of the French bank, from January 13, 1820, to January 14, 1847, the rate was kept uniformly at four per cent. In more recent years, the rates fixed on May 19, 1892,—two and a half per cent. for commercial discounts and three and a half per cent. for advances on securities,—remained for nearly three years unchanged, when they were reduced on March 14, 1895, to two and three per cent. There were changes resulting from the South African War in 1898, which carried the rate for discounts as high as four and a half per cent. for very brief intervals in 1899 and 1900, but on May 25, 1900, the rate for discounts was fixed at three per cent. and for advances at three and a half per cent. These rates remained unchanged

[1] Palgrave, 151.

for nearly seven years, until the growing pressure for capital at the beginning of 1907 led to an increase. The discount rate was fixed on January 17, 1907, at three and a half per cent., on March 21st, at three per cent., and on November 7th, at four per cent., while at London it stood at seven per cent. and at Berlin at seven and a half. With the passing of the storm, the rate went down on January 9, 1908, to three and a half per cent., and on January 23d, to three per cent., which remained unchanged for many months.[1]

The comparative uniformity of the discount rate at the Bank of France has been the result of three factors,—the magnitude of the metallic reserve; the less variable demands upon the bank than those which fall upon the Bank of England; and definite adherence to a different policy of maintaining the reserve.

A large reserve has made the Bank of France less sensitive than it might otherwise have been to temporary demands for gold. Since the suspension of silver coinage on private account the gold hoard of the bank has, with few interruptions, steadily grown until it was for a time the largest accumulation of gold in the world. The outpour of the yellow metal from the mines of South Africa accelerated the upward movement in spite of the large demands made by Russia and the United States. By the close of 1902 the gold in the bank stood at 2,542,700,000 francs, which was an increase of fully fifty per cent. over the amount ten years before. This amount was considerably increased in the following years, in spite of the monetary pressure of 1907. For a time the accumulation of silver was in excess of requirements, but after 1892 there was a gradual decline in the volume of the white metal, which in fifteen years reduced the amount by about twenty-five per cent.[2]

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[1] *Assemblée Générale des Actionnaires*, 1908, 9.

[2] M. Pallain, the governor of the bank, points out that the diminution of the reserve which took place during the trying period of 1907 was wholly in silver and arose "from the demands of the colonies or from our allies in the Latin Union of whom we have every interest in

The maximum and minimum holdings of gold and silver at the bank, for representative years since its foundation, appear in the following table, in francs:

YEAR.	GOLD.		SILVER.	
	Maximum	Minimum	Maximum	Minimum
1811	21,714,000	18,301,000	105,231,000	91,228,000
1820	51,817,000	22,488,000	167,372,000	136,925,000
1830	1,700,000		171,800,000	102,500,000
1840	26,700,000	10,000,000	235,000,000	185,600,000
1850	29,200,000	5,500,000	339,100,000	290,700,000
1852	86,800,000	63,900,000	447,000,000	349,700,000
1855	171,000,000	28,300,000	92,400,000	25,000,000
1857	95,900,000	36,500,000	35,400,000	25,300,000
1860	238,300,000	97,400,000	325,100,000	269,000,000
1865	391,200,000	215,900,000	142,800,000	93,900,000
1868	877,100,000	662,400,000	477,300,000	308,800,000
1870	739,300,000	433,700,000	579,600,000	70,900,000
1875	1,176,100,000	1,004,300,000	508,700,000	309,200,000
1877	1,556,500,000	1,204,100,000	866,700,000	637,100,000
1880	826,900,000	536,400,000	1,282,500,000	1,212,000,000
1885	1,175,800,000	995,300,000	1,106,100,000	1,024,400,000
1890	1,320,900,000	1,114,200,000	1,276,900,000	1,239,100,000
1892	1,708,300,000	1,336,200,000	1,299,000,000	1,248,500,000
1893	1,720,900,000	1,537,200,000	1,285,500,000	1,247,900,000
1894	2,061,500,000	1,695,500,000	1,283,100,000	1,237,400,000
1895	2,152,100,000	1,946,200,000	1,262,000,000	1,230,000,000
1896	2,077,800,000	1,926,500,000	1,259,800,000	1,228,200,000
1898	1,959,500,000	1,819,500,000	1,248,500,000	1,209,100,000
1900	2,338,700,000	1,863,900,000	1,158,200,000	1,108,800,000
1902	2,624,900,000	2,438,900,000	1,125,700,000	1,093,700,000
1904	2,808,400,000	2,334,700,000	1,136,000,000	1,097,100,000
1905	2,980,800,000	2,646,000,000	1,113,300,000	1,079,000,000
1907	2,811,800,000	2,580,600,000	998,500,000	922,800,000
1910	3,503,900,000	3,283,300,000	890,300,000	823,200,000
1913	3,527,600,000	3,179,000,000	691,100,000	596,700,000

Though willingly surrendering a part of its gold to London in the fall of 1907 to counteract the effects of the American crisis, the Bank of France began to draw it back again after the crisis was over, and by June 25, 1908, had accumulated a gold stock of 3,151,392,000 francs ($608,250,000), the largest ever held in its history. The discount rate remained

facilitating their re-stocking." Of the 400,000,000 francs lost since 1892, he computed that half had gone since 1904.—*Assemblée Générale des Actionnaires*, 1908, 15.

fixed at three per cent. in the face of demands in some quarters that it be further reduced [1]; but even this rate gave point to the declaration of the annual report for 1906, that if the bank was reproached for locking up so much unproductive capital, a little reflection would show that its presence in the bank vaults had procured for several thousands of millions of commercial paper circulating in France a rate of discount lower by three and sometimes by four per cent. than that of neighboring countries and that by this means a material profit had been assured to the merchants and manufacturers of the country.[2]

While the metallic reserve of the Bank of France sustains a large volume of outstanding notes, and the bank stands ready to rediscount paper for the joint stock banks, there are fewer and smaller sudden demands for money than in London. Foreign trade, the demand for exchange, and the investment of capital abroad plays a smaller part than on the London market.[3] At the close of 1907 deposits and creditor current accounts in the five principal French stock banks were about 3,500,000,000 francs ($700,000,000) and reserves in currency or on deposit in other banks were 330,000,000 francs ($66,000,000). The corresponding figures for English joint stock banks were deposits of $4,200,000,000 and cash resources of $850,000,000. Obviously, to meet possible demands of such magnitude it is essential for the Bank of England to take resolute action when its reserve is threatened. The English institution, moreover, lacks the power to meet emergencies by the issue of its notes, which is

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[1] It was pointed out that even this great reserve, including 921,072,000 francs in silver, was less in proportion to note and deposit liabilities than in 1896, being 72½ per cent. as against 75 per cent. at the earlier date; but the ratio of the reserve was as 3078 million francs gold to 914 million francs silver in May, 1908, against 1962 to 1247 in May, 1896, which afforded an immensely stronger gold position.—*Moniteur des Intérêts Matériels*, June 7, 1908, 1871.

[2] *Bulletin de Statistique*, February, 1907, LXI., 221.

[3] Palgrave, 149.

one of the chief resources of the Bank of France. It is the knowledge that this power of note issue can be availed of for making rediscounts, practically without limit, which enables the joint stock banks of France to do business in safety with slender cash reserves, and has made the central bank a refuge in time of trouble. It was declared by Leon Say that "in times of crisis the rôle of the Bank of France was to liquidate all other banks," meaning thereby that on such occasions paper suitable for discount and good securities are brought freely to the bank in the knowledge that they can be exchanged for notes.[1] The largest of the joint stock banks is the *Crédit Lyonnais*, with deposits at the close of 1907 amounting to 1,542,800,000 francs ($298,000,000). The other two of chief importance are the *Société Générale* and *Comptoir Nationale d'Escompte*, each with deposit obligations of over 800,000,000 francs.[2]

Apart from these differences in its position, however, the Bank of France has for many years pursued deliberately the policy of protecting its reserve under certain conditions by buying gold at a loss rather than by imposing upon commerce the burden of an increase in the discount rate. It is recognized that this method is not efficient in an economic crisis, because it does not operate upon the whole commercial structure to restrict loans and speculation and to attract capital from abroad. There are occasions on which the French method may properly be used, however, as when credit is not unduly expanded and where a demand for gold has arisen from special and recognizable causes. While this method of protecting the gold reserve was at first condemned by economists, and while their censure was well founded so far as it applied to its use to counteract the drain of a crisis and to redress the balance of the foreign exchanges, it has come to be recognized in recent years that it may be combined in a cautious manner with the English method of

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[1] Neymarck, *Finances Contemporaines*, 493.

[2] *Économiste Européen*, March 6, 1903, XXXIII., 295.

advancing the discount rate, with benefits to legitimate business. The choice of either method, or the prudent use of both methods in conjunction with each other, depend largely upon the ability of bankers to judge whether the drastic pressure of sharp advances in the discount rate is required in order to arrest the expansion of credit and check dangerous speculation.

While the project of direct profit-sharing is not enforced so avowedly by the government upon the Bank of France as upon some other European banks, the Treasury receives a liberal proportion of the earnings of the bank. By various forms of taxation the government in 1907 collected thirteen per cent. of gross earnings and more than twenty-three per cent. of net earnings. The total amount thus absorbed was 11,082,218 francs ($2,140,000) of which about 7,357,141 francs ($1,420,000) came under the head of the return to the State as fixed by the charter of 1897. Up to that time an annual tax had been paid of 2,500,000 francs. The new law provided that the government should receive one-eighth of the rate of discount upon the productive operations of the bank, but in no case less than 2,000,000 francs per year. The productive operations were based upon the difference between the metallic reserve and total operations.[1] Another provision of the charter of 1897 provided that profits arising from a discount rate above five per cent. should be covered to the proportion of three-fourths into the public Treasury. The object of this provision was to discourage the advance of the discount rate as a means of retaining gold. It did not become operative, however, until 1907, when certain special discounts of English paper were consented to at a rate above five per cent.

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[1] Calculations summed up by Pommier showed that from 1874 to 1896 the new plan would have yielded the government about 37,000,000 francs more than the old, even though in certain years the return would have fallen below 2,500,000 francs.— *La Banque de France et l'État*, 402–403. The total payments under the new provision and the amendment of 1911, to the close of 1913, were 95,765,133 francs.

The permission given to the government to revise the bank charter during the year 1911 was availed of to impose upon the Bank of France several new charges and obligations. An agreement was made between the government and the bank in November, which became law on December 30, 1911, embodying the new arrangements. Although the circulation was still more than 500,000,000 francs below the legal maximum under the law of 1897, the maximum was raised by the new law to 6,800,000,000 francs ($1,312,400,000). The provision of the law of 1897, by which the government was granted one-eighth of the proceeds of discounts upon the productive operations of the bank, was modified so that whenever a rate of discount prevailed higher than three and a half per cent., the proportion paid to the government should be one-seventh, and when a rate higher than four per cent. prevailed, the proportion should be one-sixth. The amount of the advance to the Treasury, without interest, was increased by 20,000,000 francs to a total of 200,000,000 francs ($38,600,000). The bank was required to relieve of all charges the transfer of funds for depositors between different places and to discount under proper conditions drafts payable abroad and in the French colonies.[1]

The number of branches and other banking offices of the Bank of France has been increased from time to time, from 249 at the close of 1894, to 467 at the close of 1907, and 583 at the close of 1913. The number of employees increased from 2332 in 1894 to 3827 in 1913.

[1] *Économiste Européen*, January 5, 1912, XLI., 13.

CHAPTER IV.

FIRST CENTURY OF THE BANK OF ENGLAND.

The Economic and Financial Conditions Out of Which the Bank Grew—Early Difficulties and the First Suspension of Specie Payments—The Loans of the Napoleonic Wars and the Restriction of 1797—Pitt's Enormous Drafts upon the Bank.

THE Bank of England, like many of the Continental banks, had its origin in the needs of the State. The institution which resulted has been several times the victim of the monetary necessities of the government, but has not been dragged quite so persistently as the banks of Italy, Austria, and Russia through the mire of depreciated money and forced legal tender. The Bank of England has come to enjoy, by a series of changes in the law, the substantial monopoly of note issue in England and Wales, and has proved one of the strongest banking institutions of the world. The note circulation, since the Act of 1844, is based wholly upon securities and deposits of coin and bullion. The rigidity of the English system, by which expansion is prevented to meet changing conditions of business, has received the condemnation of most students of political economy, but this has not kept it from becoming to some extent the model of national banks of later foundation on the Continent of Europe. The defects of the English system of note issues are those which are most apparent in a country where deposit banking is in its infancy. They are less obvious and oppressive in England than they would otherwise be because of her small area, the wide use of credit instruments and the closely-knit commercial relations of her people.

The creation of the Bank of England is involved with both the political and fiscal history of the close of the seventeenth century. England was behind Italy and Holland in the development of the mechanism of modern commerce, and the proposition to establish a banking system was sharply resisted by Gerard Malynes, who published in 1601 a *Treatise of the Canker of England's Commonwealth.* Malynes described the Continental method of banking with a fairness and precision which enable its leading features to be readily understood, in spite of his opinion that payments by the banks by transfers upon their books were "almost or rather altogether imaginative or figurative." [1] English merchants deposited their cash for a time in London Tower, but £120,000 was seized by Charles I., in 1640, and only repaid after violent protests and long delay.[2] The goldsmiths then became the bankers for the community and paid interest for the money left in their custody. There was much opposition to the new system at first and, strange to say, one of the last to adhere to the old method of keeping his cash in a strong box at home was Sir Dudley North, one of the most progressive thinkers on political economy of his time. As Macaulay graphically recounts North's experience, "He found that he could not go on Change without being followed around the piazza by goldsmiths, who, with low bows, begged to have the honor of serving him. He lost his temper when his friends asked where he kept his cash. 'Where should I keep it,' he asked, 'but in my own house?'" [3]

While commerce was coming to feel more and more the need of a banking institution, the government was also feeling the necessity of some method of raising money beyond the precarious plan of sending agents to individual merchants to see what they would lend. The historic legend that King James I. attempted out of a spirit of pure wantonness to levy excessive and unusual taxes upon the people of

[1] Cunningham, II., 98.

[2] MacLeod, *Theory and Practice of Banking*, I., 435.

[3] *History of England*, Chap. xx.

England is not fully borne out by the facts. The method of taxation which he sought to introduce was simply a phase of the transition from feudal to modern methods of carrying on public affairs. As a careful student of the economic history of England puts it :

> According to ancient usage the King had been able to live of his own, and had recourse to Parliament in emergencies. The chief problem of the seventeenth century was to find a source of revenue which would supply a regular income, that might adequately correspond to the increased responsibilities of government in these more modern times. The first attempt to do this was in the Great Contract, proposed to the Parliament in 1610 ; by this James proposed to relinquish all the occasional payments from feudal tenures, in return for a regular income of £200,000 to be derived from parliamentary supplies.
>
> As this bargain broke down, James was a considerable sufferer ; Charles I., to whom Tunnage and Poundage were not voted for life, was left in a position of direct dependence on parliamentary grants, and he did not conceal his resentment. During both of these reigns every effort was made to secure supplies from extra-parliamentary sources ; while the Commons, who were eagerly anxious to assert their position and exercise a real control over the foreign as well as the domestic policy of the realm, were always on the alert to thwart these attempts. [1]

The parliamentary party succeeded in organizing a system of taxation by means of customs duties, monthly levies upon real estate and excises on internal trade, which continued in full force after the restoration of the Stuarts. These taxes laid the foundation of the modern method of defraying the expenses of government, but they were inadequate for many extra expenses and for carrying on the wars in which Charles II. and William III. found themselves involved. Charles II. turned for assistance to the goldsmiths. But his rapacity soon outran his borrowing capacity, and he gave a violent shock to credit by a proclamation of January 2, 1672, refusing payment out of the Exchequer of money advanced and sequestrating £1,328,526 to his own use. The money, although lent by the goldsmiths to the King, was the prop-

[1] Cunningham, II., 215.

erty of some 10,000 depositors and its loss spread ruin and suffering throughout London. A long course of litigation ensued, which finally ended in the reign of William by the consolidation of the indebtedness with other portions of the permanent national debt.[1] This conduct on the part of the Stuart King made the people and the bankers cautious about loaning to the government, and William III. was driven to desperate expedients to obtain revenue to carry on the war with France. A poll tax was imposed, stamp duties were levied which have never been entirely repealed, and enormous prizes, in the form of annuities on the tontine plan, were offered to those who would lend to the State.

A plan was presented to the Committee of the House of Commons, while they were considering the claims of the goldsmiths in the autumn of 1691, which contained the germs of the organization of the Bank of England. William Paterson, himself an obscure Scotchman, but supported by several wealthy London merchants, offered to advance £1,000,000 to the government on condition of receiving £65,000 a year as interest and the costs of management and authority to issue bills which should be legal tender. The government refused to give forced currency to the bills and the matter fell through until 1694. Montague, the ingenious and enterprising minister of William, then sent for Paterson and requested him to organize a plan. The new project contemplated a loan of £2,000,000 to the government at seven per cent., but the ministry, who were accustomed to discounts and commissions of forty per cent. on short loans, could not be made to believe that a loan with no fixed date of maturity could be floated at such a low rate. The government turned to other plans, but Paterson persevered and presently obtained the help of Mr. Michael Godfrey, who carried the scheme to a successful conclusion. It was put in definite shape by Montague and was saddled upon the Ways and Means bill (Statutes 1694, ch. 20), in a form which would be characterized in modern legislation as "a rider."

[1] MacLeod, *Theory and Practice of Banking*, I., 441–44.

"The Governor and Company of the Bank of England" was the official designation of the new bank, but it was called by its enemies the Tonnage Bank, because the bill levied certain tonnage dues as well as customs and other taxes. The necessity of money was so great that the bill passed without a division in the Commons, and in a very thin house. There was some opposition in the House of Lords, and much criticism of the action of the Commons in attaching the provisions for the bank to a tax bill. It was already May, according to the new style, when the final struggle occurred, and the debate of the last day continued from nine in the morning till six in the evening. It was proposed to strike out all the clauses relating to the bank, but its defenders suggested that this would be to invite a contest with the Commons over the old political issue, whether the Lords had the right to amend a money bill. This argument prevailed, the amendment was rejected, thirty-one votes in its favor to forty-three in the negative, and a few hours later the bill[1] received the royal assent and Parliament was prorogued.

The new bank was to be organized upon the loan by the stockholders of £1,200,000 ($6,000,000)[2] to the government, and was authorized to issue notes, to deal in bullion and commercial bills and to make advances on merchandise. Subscriptions were opened on Thursday, June 21st, in the Mercer's Chapel, and one-quarter of the capital was subscribed the first day. Half was subscribed within three days, and by Monday noon, July 2d, the entire subscription was completed. Among the subscribers were Sir John Houblon, the first Governor, who was descended from a Flemish refugee;

[1] The date was April 24, 1694, old style; May 4, new style. The dates here given are from the contemporary records and are old style.

[2] The value of the English pound sterling is so generally known that I have not thought it necessary in this and the following chapter to give the equivalents in United States money for the sums named. The value of the pound sterling as reported by the Director of the Mint of the United States is $4.8665, but for the purpose of computing round figures is usually taken at $5.00.

Michael Godfrey, one of the most active organizers of the bank and the first Deputy Governor; Queen Mary; the Duke of Leeds, the Duke of Devonshire, the Earl of Portland, the Countess of Carlisle, Lord Godolphin, Lady Ann Mason, Sir Stephen Fox, and Sir John Trenchard. The new bank began the discharge of its pledges to the government by paying into the Exchequer £112,000 in bank-bills, sealed with the seal of their corporation, which bore the figure of Britannia sitting on a bank of money.[1] The business of the bank was described by Godfrey, who wrote a tract in its support, as follows:

> They lend money on mortgages and real securities at five per cent. per annum. If the titles of land were made more secure, money would be lent on land at four per cent. per annum, and in time of peace at three per cent. Foreign bills of exchange are discounted at four and a-half per cent.; inland bills and notes for debts at six per cent. They who keep their cash in the bank have the first of these discounted at three per cent., and the other at four and a-half. Money is lent on pawns of such commodities as are not perishable at five per cent., and on the Fund of the City of London Orphans at five per cent.[2]

The stock of the bank was at par on December 13, 1695, little more than a year after it began actual operation, but within the next two years it had to deal with a combination of difficulties which caused the suspension of specie payments, and required all the courage and ability of the directors to surmount. The bank was essentially a Whig institution and a representative of the commercial interests of London; and it encountered the same sort of jealous hostility from the landed interest which has prevailed in more recent times against the moneyed interests of "Wall Street" and "Lombard Street." The fate of the bank was so closely bound up with that of the Revolutionary government that it was compelled to lend its support on all occasions of emergency, or run the risk of seeing the entire debt due by the government repudiated by the restoration of the

[1] Rogers, *The First Nine Years of the Bank of England*, 3.

[2] Rogers, 20.

Stuarts. The Bank, in the forcible language of Macaulay, "Was Whig not accidentally, but necessarily. It must have instantly stopped payment if it had ceased to receive the interest on the sum which it had advanced to the government; and of that interest James would not have paid one farthing." Mr. Bagehot declares that without the aid of the bank:

> Our national debt could not have been borrowed; and if we had not been able to raise that money we should have been conquered by France and compelled to take back James II. And for many years afterwards, the existence of that debt was a main reason why the industrial classes never would think of recalling the Pretender or of upsetting the Revolution settlement: the "fundholder" is always considered in the books of that time as opposed to his "legitimate" sovereign.[1]

The political enemies of the bank were supported by the goldsmiths and other financial men whose monopoly of money lending was assailed by the new institution. The managers of the bank enjoyed from the outset three privileges which gave them an immense superiority over all competitors and enabled them to reduce the charges for banking. They received the government balances; they enjoyed alone the privilege of limited liability, by which the shareholders were liable for the debts of the bank only to the amount of their investment and not for its entire liability; and they were able to loan money in excess of their deposits by reason of the circulating notes they were allowed to issue against the government debt. The goldsmiths were able to do only the business of deposit banking, and were supposed to lend only coin, or credit for which they held coin in their vaults.[2] The goldsmiths, therefore, undoubtedly felt justified by reasons of self-preservation in lending their support to any plan which would break down their powerful rival. Such a plan was presented in the scheme of a Land Bank which was brought before Parliament by Hugh Chamberlain in 1695.

[1] *Lombard Street*, Works, V., 64.

[2] Cunningham, II., 396.

Chamberlain's scheme was to issue notes upon landed property to one hundred times the annual rental, lend the notes to the owner of the land, and in some unexplained way furnish money to the government at the same time. The absolute absurdity of calculating the money value of a piece of real estate at one hundred times the rental, when the fee simple was worth only twenty times the rental, or one-fifth as much, was demonstrated over and over again, but the opponents of the Land Bank were answered that they were "usurers," and the enemies of the Bank of England were ready to catch at any scheme which promised to promote their projects. Notwithstanding its folly the scheme was authorized by law and received the royal assent on April 27, 1696, (7 and 8 William III., c. 31). The Land Bank proposed to advance to the government £2,564,000, on which interest was to be paid at the rate of seven per cent. annually, secured by a special tax on salt. The King was authorized to appoint a body of commissioners to receive subscriptions, half of which were required to be subscribed before August 1, 1696, and the whole before January 1, 1697. Subscriptions did not materialize, however, with such rapidity as expressions of sympathy for the enterprise. The Lords of the Treasury subscribed £5000 on behalf of the King, but the other subscriptions never exceeded £2100, and it is recorded about three years later that Dr. Chamberlain, "sole contriver and manager of the Land Bank, is retired to Holland, on suspicion of debt." [1]

The immediate effect of the new legislation was to depress the price of bank shares, which fell from 107 on January 31st, to 83 on February 14th.[2] Capital was not so abundant then as now and the mere offer of a new public stock was sufficient to divert investment from the old and depress its value. It was argued even by the friends of the bank that it must be the sole institution of its kind, like the banks of Venice, Amsterdam, and Hamburg, in order to retain strength and usefulness. The experience that the stocks of an existing

[1] Rogers, 56.

[2] Rogers, 50.

company declined under the influence of competition was illustrated in a striking manner by the history of the East India Company, whose stock stood at 158 in the beginning of 1692, but sank to 38 after Montague brought forward his plan for the new or English East India Company. The close calculations which are now made regarding the earning capacity and value of stocks were little understood at that time and the unreasonable declines as well as extravagant advances which occurred are illustrated a little later by the history of the Mississippi scheme in France and the South Sea Bubble.

The bank had real financial difficulties to cope with as well as those arising from political distrust and competition. The recoinage which was ordered by the Act of 7 William III., ch. 1, to take full effect on February 1, 1697, found the bank with a large quantity of clipped coin on hand for which they were bound to pay in new pieces of full weight. The new coinage was progressing too slowly to meet demands, the smallest denomination of bank-notes was £20, and the result was a run upon the bank for cash during the week beginning May 4, 1696. The goldsmiths were charged with gathering together £30,000 in notes for the purpose of breaking the bank. The directors, knowing the purpose of the demand, refused to redeem these notes, but voted to continue their payments to their ordinary customers. Sir John Houblon, who was Lord Mayor as well as Governor of the bank, succeeded in reassuring the applicants for cash for a time, and the proprietors of the bank agreed to put off their dividend. The government failed, however, to make an expected payment of £80,000 and the bank was compelled to accept an order of the Lords of the Treasury on July 13, 1696, that no public notary should enter a protest upon any bill of the Bank of England for fourteen days. As a protest could only be effective at that time when thus entered, the effect of the order was a practical suspension of specie payments, which lasted until the autumn of 1697.

It is not surprising that the bank was unable to cope with its difficulties and that many impracticable and speculative

schemes were set on foot, for the time was essentially a period of transition. The industrial and commercial world had barely set foot upon the threshold of the wonderful development of the eighteenth and ninteenth centuries. Great Britain until the time of Elizabeth had been only a second or third rate power in Europe, overshadowed by the great Kingdoms of France and Spain, by the ancient prestige of the German Emperor, and by the power of the Pope. Her influence was raised by the defeat of the Spanish Armada, but the population of England and Wales at the Revolution of 1688 was only five and a half millions, and the supremacy in the money markets and trade of the world still belonged to the bankers and merchants of Holland and Italy. The use of bank-notes, except as mere certificates against which coin and bullion was held to the full amount, had begun only thirty years before the Revolution, and the proper management of a banking currency was almost purely a problem of abstract theory rather than of practical experience. If merchant princes and the kings of finance stood upon the threshold of an unknown world, the mass of the community but dimly viewed it from afar. They were easily deluded by extravagant hopes and easily misled by the fairy tales of the splendid riches and possibilities of the Western Continent. Least of all could the general public be expected to grasp instantly the fact, which is not accepted by great masses of people to-day, that a paper currency, in order to have a steady purchasing power, must be redeemable on demand in coin. As Mr. Cunningham acutely says, regarding the run upon the Bank of England in 1696 :

> This was a principle which men did not find it easy to recognize. They saw that the man who had wealth in any shape had credit; but they did not apparently understand that bills can only be circulated, when there is a certainty that they can be met on presentation, and that wealth, in forms which cannot be readily realized, is not a satisfactory basis for a credit circulation.[1]

The suspension of specie payments was naturally followed by a depreciation in the bank-notes. The discount on July

[1] *Growth of English Industry and Commerce*, II., 397.

28, 1696, was ten per cent. and October 10th, twenty per cent. The Bullion Report, discussing this subject in 1810, declared that "the quantity of the notes became excessive, their relative value was depreciated, and they fell to a discount of seventeen per cent." This opinion, that the note issues were excessive, is supported also by the high authority of Professor Rogers,[1] but is disproved by Professor MacLeod, in so far as excess of issues is to be interpreted as implying a larger supply of money than could be absorbed by the demands of commerce. That the issues of the bank were excessive in proportion to its coin reserve is hardly a subject for dispute, in view of the account submitted to the House of Commons on December 4, 1696, showing the amount due on notes for running cash to be £764,196, and the actual cash held £35,664, in addition to £9,636 in goldsmiths' notes. That the issues were excessive in this sense is proved by the suspension of specie payments, but that they were excessive in the sense implied by the Bullion Report is shown to be untrue by the state of exchange on Hamburg, which promptly became favorable to England upon the reform of the coinage and while bank-notes were still at a discount. The test whether issues were in excess of the necessities of trade was the state of the foreign exchanges, which were at par in coin, and the depreciation in the bank-notes was plainly due to the fact that they had ceased to be redeemable in coin on demand.[2]

The collapse of the Land Bank and the necessity for new government loans led to the legislation of February 3, 1697, to increase the capital of the Bank of England and give it wider privileges. The charter was renewed until the expiration of twelve months notice after August 1, 1710, and the bank was authorized to issue notes to the amount of the subscriptions for the new loan, provided the notes were made payable to bearer on demand. It was declared that in case of default in redemption, the notes might be paid at the

[1] *First Nine Years of the Bank of England*, 88.

[2] McLeod, *Theory and Practice of Banking*, I., 479–484.

Exchequer out of the annuity due the bank, and a trace of the theory of the legislation of 1844 appears in the provision that all notes above the sum of £1,200,000 were to bear a distinguishing mark. The new subscriptions for the capital amounted to £1,001,171; and £200,000 in bank-notes and £800,000 in Exchequer tallies, which were both below par, were taken out of circulation. The notes previously issued had borne interest, and now rose above par, while the bank was able to issue non-interest bearing notes which circulated at par. The subscriptions to the additional stock in 1697 seem to have been made by the original shareholders and were repaid to them between 1697 and 1707 from the profits of the bank.

The government was again in serious need of money when the charter was renewed in 1708 until August 1, 1732, and the bank was authorized to double its capital of £2,201,171, and to circulate £2,500,000 in Exchequer bills. The next extension of the charter was made in 1713 (Statute I., c. 11) and continued the bank until twelve months notice to be given after August 1, 1742. The subscription lists for the new stock were opened on February 22, 1709, and the whole sum was subscribed before one o'clock. The bank under this arrangement advanced £400,000 to the government without interest and surrendered £1,500,000 in Exchequer bills to be cancelled, upon condition of receiving an annuity of £106,501. The principal of both these items was added to the permanent debt, which afterwards became the basis of the note circulation of the bank. Calls for additional capital were made upon the stockholders to the amount of £656,204 in 1709 and £501,448 in 1710. Several of the debts of the government to the bank were consolidated in 1716 and reduced from six to five per cent., and £2,000,000 in Exchequer bills were cancelled in 1718 and added to the permanent debt due the bank by the government. The settlement of the affairs of the South Sea Company in 1721 resulted in the purchase of £200,000 in annuities by the bank at twenty years' purchase, making a new addition to the permanent debt of £4,000,000. These loans increased

the permanent debt to £9,375,027, exclusive of various advances of a different character which had been repaid.

The South Sea Company was essentially a Tory institution and they proposed as early as 1717 to increase their capital from £10,000,000 to £12,000,000 for the purpose of wiping out the debt due the Bank of England and several minor obligations. The bank made counter propositions, but the real contest occurred in 1719 and 1720 over the proposition of the South Sea directors to assume the entire national debt. It was estimated at £30,981,712 and was to be consolidated into one fund, to be added to the capital of the company at five per cent. interest annually. The company proposed to pay a bonus of £3,500,000 to the government in four instalments, beginning in 1721. The bank met this remarkable proposition by an offer of its own to assume the entire debt on terms which were calculated to be about £2,000,000 more advantageous than those of their rivals. The South Sea Company obtained three days to amend their offer and increased the bonus to £7,567,500. The bank rejoined with another offer of £1,700 in bank stock for every annuity of £100 for ninety-six and ninety-nine years and the reduction of the interest on the consolidated debt after June 24, 1727, to four per cent.

The South Sea bill passed the House of Commons April 2, 1720, by a vote of 172 to 55 and passed the Lords by a vote of 83 to 17.[1] The South Sea stock was forced upward to a preposterous figure under the influence of the same fever of speculation which raged at about the same time in France over the Mississippi scheme, but capital was soon sunk in this and other unproductive enterprises and the reaction wrecked the credit of the company and came near wrecking that of the bank. The directors of the South Sea Company appealed to the bank for help, goldsmiths and private bankers began to fail, and a run upon the bank itself began, which was only staved off by payments in light sixpences and shillings and by engaging men to fill up the line, draw

[1] MacLeod, *Theory and Practice of Banking*, I., 496–99.

money and re-deposit it at another window. Fortunately the festival of Michaelmas, during which the bank was usually closed, intervened and when it was over the public alarm had subsided.

The bank had weathered severe storms, had seen two powerful rivals crushed and its own monopoly confirmed, and justly felt that it had proved its capacity to endure. Thirty-eight years after its foundation, on Thursday, August 3, 1732, the corner-stone of a new building was laid in the presence of the Governor and other officials of the bank in Threadneedle Street. The directors moved from their old quarters in Grocers' Hall on June 5, 1734, and from that day "The Old Lady of Threadneedle Street" occupied the massive building which is still consecrated to her use.[1] A statue of King William, under whom the first charter was granted, stands in the hall, with a Latin inscription which accords to him the honor of official founder of the bank.

When the time approached for a renewal of the charter in 1742, the bank advanced £1,600,000 to the government without interest by a call upon their proprietors for £840,004, which raised their capital stock to £9,800,000. The advance without interest was substantially part of a process of conversion by which the interest on the original advance to the government at the foundation of the bank and on £400,000 advanced in 1708 was reduced from six to three per cent. The bank simply continued to receive the old interest payment, but doubled the principal of the loan. The charter was extended at this time until twelve months notice after August 1, 1764. Another adjustment with the government in 1746 led to the cancellation of £986,000 of Exchequer bills, upon which the bank was to receive an

[1] The buildings have been much enlarged since and now cover the whole area between Threadneedle Street, Princes Street, Lothbury and Bartholomew Lane,—a space of more than three acres. The bank originally employed about fifty clerks, but the number is now about fifteen hundred and the pay-roll amounts to about £300,000, exclusive of £50,000 paid annually in pensions.—H. J. W. Dam, *The Bank of England*, *McClure's Magazine*, IV. 460.

annuity of four per cent., and a call upon the proprietors for ten per cent., which made the bank capital £10,780,000. The rate of interest on portions of the debt amounting to £8,486,000, which had not yet been reduced, was changed to three and a half per cent. in 1749 for the seven years beginning with Christmas, 1750, and thereafter to three per cent. [1] The charter was renewed in 1764 until twelve months notice after August 1, 1786, upon the conditions of a direct payment to the Exchequer of £110,000 and a loan for two years on Exchequer bills of £1,000,000 at three per cent. The next renewal, in 1781, carried the charter along until twelve months notice after August 1, 1812, and provided for a loan for three years of £2,000,000 at three per cent. A call upon the proprietors for £862,400 in 1782 advanced the capital of the bank to £11,642,400, at which it remained until 1816, when it was increased to £14,553,000 by adding twenty-five per cent. to the stock of each proprietor from the reserved profits or "rest."

The Bank of England at its institution enjoyed no monopoly of note issues, so that Chamberlain's plan for a Land Bank was not a violation of the privileges of the older establishment. The managers of the Bank of England endeavored to protect themselves in the legislation of 1697 and secured a provision that during the continuance of the corporation no other institution in the nature of a bank should be erected or countenanced within the Kingdom by act of Parliament by bodies exceeding six persons. This provision was calculated to prevent the formation of strong joint stock banks, and dangerous rivalry was not feared from private firms of six persons with unlimited liability. An effort to narrow the limits still more closely was made in the Act of 1709 by making it unlawful "for any body politic or corporate whatsoever, created or to be created (other than the said Governor and Company of the Bank of England), or for any other

[1] The operation of 1752, by which the balance of annuities granted in 1721 were consolidated with other three per cent. stocks, gave rise to the familiar designation, "Three per cent. consols," the latter word being a contraction of "consolidated."—Gilbart, I., 43.

persons whatsoever, united or to be united in covenants or partnership, exceeding the number of six persons, in that part of Great Britain called England, to borrow, owe, or take up any sum or sums of money on their bills or notes, payable at demand, or at any less time than six months from the borrowing thereof." This clause was repeated in 1716, when the usury laws were suspended as to the Bank of England and the directors were authorized, "at their own good liking" to borrow or take up money at any rate of interest they pleased. The conception of banking at this time involved necessarily the privilege of issuing circulating notes, and it was determined to close all loop-holes in this matter upon the renewal of the charter in 1742. It was accordingly provided (15 George II., c. 13, s. 5):

> And to prevent any doubts that may arise concerning the privilege or power given by former Acts of Parliament, to the said Governor and Company of exclusive banking, and also in regard to the erecting of any other bank or banks by Parliament, or restraining other persons from banking during the continuance of the said privilege granted to the Governor and Company of the Bank of England, as before recited, it is hereby further enacted and declared, by the authority aforesaid, that it is the true intent and meaning of the Act that no other bank shall be erected, established or allowed by Parliament, and that it shall not be lawful for any body politic or corporate whatsoever, erected or to be erected, or for any other persons whatsoever, united or to be united, in covenants or partnership, exceeding the number of six persons, in that part of Great Britain called England, to borrow, owe, or take up any sum or sums of money, on their bills or notes, payable at demand, or at any less time than six months from the borrowing thereof during the continuance of such said privilege of the said Governor and Company, who are hereby declared to be and remain a corporation with the privilege of exclusive banking, as before recited.

This limitation upon the power of other corporations did not prevent the issue of promissory notes and checks; nor did it prevent the issue of bank-notes by individuals and firms of not exceeding six persons. The opportunity which this afforded for the creation of joint stock banks of discount and deposit was not understood and availed of till

much later, but the opportunity for the issue of circulating notes by individuals and small firms was availed of. The notes of the Bank of England had little circulation outside of London and the rapid development of canal building and other enterprises during the last half of the eighteenth century created a demand for a larger credit currency. Professor MacLeod declares, in speaking of the principle of monopoly embodied in the charter of 1697, that "The frightful convulsions and collapses of public credit which have taken place during the last three-quarters of a century are chiefly due to this great wrong."[1] The effect was not felt until nearly a century later, when England began to take her place at the head of the commercial nations, but after the crisis of 1782 "multitudes of miserable shopkeepers in the country, grocers, tailors, drapers, started up like mushrooms and turned bankers, and issued their notes, inundating the country with their miserable rags." Burke said that when he came to England in 1750 there were not twelve bankers out of London; in 1793 there were nearly four hundred. The Bank of England began to issue notes for £10 and £15 as early as 1759, but the private bankers issued them for smaller amounts, and in 1775 an act was passed to prohibit notes of less than twenty shillings, and two years afterwards the limit was raised to £5.

The prohibition upon note issues was probably one of the causes which contributed to the use of checks. The notes issued by private bankers were at first written on paper for any odd sum, like promissory notes. The practice was introduced by Child and Co., in 1729, of having the notes partly printed and partly written, like a modern check. These notes continued to be issued till about 1793, when the existing system was introduced, of giving the depositor a credit for the full amount of his deposit and authorizing him to draw checks at his convenience against it.[2] The issue of

[1] *Theory and Practice of Banking*, I., 479.

[2] MacLeod, *Theory and Practice of Banking*, I., 331, 515. M. Juglar (343) says that the use of checks replaced the use of bills in 1772.

notes by private bankers was not forbidden until the Bank Act of 1844, but their use gradually diminished as the greater convenience of checks came to be understood. The Act of 1742 would probably have prohibited joint stock banks of discount and deposit, if it had been supposed that they could be carried on without the issue of notes, but note issues were then regarded as a necessary part of successful banking.

The Bank of England had to face serious financial crises in 1772, 1782, and 1792. Their policy in 1772 and 1782 was to support credit and to make advances to solvent merchants, with the result that the foreign exchanges turned in their favor and general bankruptcy was avoided. Mr. Bosanquet was Governor of the bank and he adopted the policy of contracting issues while the drain of specie was going on and expanding them when the tide turned. The crisis of 1793 was precipitated by the breaking out of war with France, and was quickly followed by the stoppage of about one hundred country banks and the serious embarrassment of many others. The directors of the bank became alarmed, refused credit to strong houses and created a great scarcity in the circulating medium by the discredit cast on the notes of the country banks. The policy of contracting issues was not justified by the state of the exchanges, for gold and silver were pouring into England from France in consequence of the issue of the *assignats*, which rapidly drove coin out of circulation, and exchange was favorable with both Amsterdam and Hamburg. The absolute refusal of the bank to lend its support to credit compelled the issue of Exchequer bills by the government, which quickly improved the situation.

The long suspension of specie payments during the wars with France was brought about by the reckless and unscrupulous course of Mr. Pitt, who dictated the entire policy of the government. The relations of the bank with the government had grown closer from year to year since 1718, when subscriptions to public loans were first received there, as affording greater convenience than the Treasury.

The bank soon after began to make advances of money in anticipation of the land and malt taxes, and upon Exchequer bills and other securities.[1] They did this in the face of the provision of the charter of 1694, that if they should advance any money to the Crown whatever, except by the special permission of Parliament, they should forfeit treble the value of all such advances. The usual limit of these temporary advances was £20,000 or £30,000 and it became a subject of complaint if the amount was increased to £50,000. The limit was stretched in the American war to £150,000 and Mr. Bosanquet in 1793 became uneasy as to the legality of such advances without authority of Parliament. The directors, therefore, applied for an act of indemnity for past advances and permission to make them in the future to a limited amount, not to exceed £100,000. Mr. Pitt readily agreed to bring in a bill for this purpose, but he quietly dropped the limitation and passed the measure in this form through Parliament. He was now armed with absolute power to draw upon the bank, unless the directors should refuse to honor his bills, and he was neither conservative nor scrupulous in the use of the power.

Mr. Pitt availed himself of the new law to scatter gold broadcast over Europe to promote the combination against France, with the result of draining the country of specie and creating unfavorable foreign exchanges. He drew heavily upon the bank and drove them into such close quarters that they passed a resolution on January 15, 1795, that the Chancellor of the Exchequer must make his financial arrangements for the year without expecting further assistance from them than advances on Treasury bills not exceeding £500,000 at any one time. Mr. Pitt promised to reduce the existing advances to that amount by payments out of the first loan which was in process of subscription, but he paid little attention to such promises. The bank was compelled by the demands of the government to expand its issues in the face of unfavorable exchanges until in February, 1795, they

[1] Gilbart, I., 36.

reached £14,000,000. The drain of gold set in strongly in September, the price of gold in bank-notes rose to £4 2*s.* per ounce (about five shillings above parity, which was £3 17*s.* 10½*d.*), and the directors of the bank were compelled to sharply restrict their discounts. They gave notice on December 31, 1795, that if the applications for discounts on any day exceeded the sum to be advanced, a *pro rata* proportion of each applicant's bills should be returned, "without regard to the respectability of the party sending in the bills or the solidity of the bills themselves."[1] Matters went from bad to worse until February 11, 1796, when the court of directors adopted the resolution :

> That it is the opinion of the Court, founded upon its experience of the effects of the late Imperial loan, that if any further loan or advance of money to the Emperor, or other foreign state, should in the present state of affairs, take place, it will in all probability prove fatal to the Bank of England.
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> The Court of Directors do therefore most earnestly deprecate the adoption of any such measure, and they solemnly protest against any responsibility for the calamitous consequences that may follow thereupon.

Mr. Pitt replied that after the repeated promises he had made he saw no occasion for the resolutions and should regard them as having been adopted in a moment of needless alarm. This did not prevent him from continuing secret remittances to the Continent, but suspension of specie payments was staved off until the next year by the restriction of accommodation to merchants and the favorable crops of 1796. The advances upon Treasury bills amounted on June 14, 1796, to £1,232,649 and Mr. Pitt demanded £800,000 more in July and a like sum in August. The bank refused the second demand but granted a request by Mr. Pitt in November for £2,750,000, on condition that the advances on Treasury bills should be paid out of this loan. "Mr. Pitt," in the terse language of Professor MacLeod, "took the money but never paid off the bills."[2]

[1] Gilbart, I., 45.

[2] *Theory and Practice of Banking*, I., 524.

The landing of a French frigate in one of the Welsh harbors and orders from the government to the farmers to drive their stock into the interior, caused a run upon the Bank of England which finally brought the long dreaded catastrophe of suspension of payment in coin. The bank had been making frantic efforts for several weeks to contract their issues and had reduced them from £10,550,830 on January 21, 1797, to £8,640,250 on February 25th, but their cash was reduced on the latter date to £1,272,000. The cabinet met the next day, which was Sunday, and issued an Order in Council, "That the directors of the Bank of England should forbear issuing any cash in payment until the sense of Parliament can be taken."[1] A meeting of merchants was held on Monday, with the Lord Mayor in the chair, which adopted a resolution similar to that adopted on the successes of the Pretender in Scotland in 1745, that "we will not refuse to receive bank-notes in payment of any sum of money to be paid us, and we will use our utmost endeavors to make all our payments in the same manner." A select committee was appointed by Parliament to inquire into the bank's affairs, and found them in a prosperous condition except for the scarcity of coin and bullion. Their assets were £17,597,280, representing a surplus of £3,826,890, exclusive of the government debt of £11,686,800, which paid three per cent. Suspension of payments was enacted until June 24th and the bank was authorized to issue notes under £5. The bank-notes were made legal tender and were to be received at par in the payment of taxes. The bank was authorized to receive special deposits in coin in exchange for notes and to repay three-fourths of the amount in coin if demanded. The restriction was prolonged on June 22d to one month after the meeting of the next session of Parliament and was again prolonged on November 30th, at the next session, until six months after the conclusion of a definitive treaty of peace.

The policy of the bank in restricting commercial discounts, though forced upon it in a measure by the demands of the

[1] Levi, 74.

government, was the cause of serious complaint in the mercantile community and led to much discussion of other methods of meeting the demand for credit. The bank refused to establish branches in the country and their charter prohibited any other strong company from doing so. The very policy of restricting their issues in the autumn of 1796, which the directors regarded as a measure of extreme precaution, intensified the demand for gold by creating a scarcity of currency which led to the withdrawal of gold by depositors. The irritation among the merchants was such that a meeting was held in London Tavern on April 2, 1796, which appointed a committee to devise a plan to restore the circulating medium, if practicable without infringing the monopoly of the bank. Mr. Walter Boyd, an eminent merchant, drew up a report on behalf of the committee, authorizing a board of twenty-five members to be named by Parliament to issue circulating promissory notes upon deposits of coin, bank-bills, and commercial paper.[1] The committee were persuaded by the Chancellor of the Exchequer to delay action and nothing ever came of their plan, but it was the opinion of Mr. Boyd that the public stocks suffered as well as commercial paper by the scarcity of currency and the necessity of forced sales of securities to obtain it. Sir William Pulteney, during the debate on the bill authorizing the suspension of cash payments, asked leave to bring in a bill for another bank if the Bank of England did not resume on June 24, 1797, as was then proposed. The proposition was defeated at the time but gained such strength within the next two years that public meetings were held and pamphlets written in its support. The bank directors became alarmed, and as government was still pressing for money, they offered £3,000,000 without interest for six years as the price of a renewal of the charter. Mr. Pitt accepted the terms and passed a bill in 1800 extending the monopoly of the bank for twenty-one years after 1812, or until 1833.

[1] MacLeod, *Theory and Practice of Banking*, I., 523.

CHAPTER V.

SECOND CENTURY OF THE BANK OF ENGLAND.

The Continued Suspension of Specie Payments—The Bullion Report and the Act of 1819—The Contest against the Monopoly of the Bank of England and the Rise of the Joint Stock Banks—The Bank Act of 1844—Theory of its Operation and its Failure to Carry Out the Theory—The Recent Accumulation of Gold in the Bank.

THE great events of the second century of the history of the Bank of England have been the resumption of cash payments, the restriction of circulation by the Bank Act of 1844, and the recent accumulation of gold in the custody of the bank. The Act of 1844 has been the turning point of almost infinite discussion of the theory and practice of banking in England, but, whatever its merits or defects, it has not destroyed the character of the Bank of England as the guardian of the cash reserve of the country, nor prevented London from becoming the centre of the exchanges of the world. Freedom from danger of invasion, the development of banking and credit beyond any point attained elsewhere, a market free to the world's commerce, and a single fixed standard of value have raised England to supremacy among commercial countries and linked the history of her financial progress in some degree with that of all other nations.

The British nation was far from her present position at the close of the Napoleonic wars. Political and military triumphs had come to her, but they had been at the expense of the crippling of her merchant marine, the increase of her

debt to $4,000,000,000, and the suspension of payments in specie. The Bank of England by prudent management kept its notes for several years at par with coin and the depreciation was at first so gradual as hardly to be noticed. One of the elements of confusion in the discussion of the effect of the restriction of specie payments was the fact that bank-notes became the sole medium of ordinary transactions. The issue of £1 notes by the bank drove the gold from circulation even before the depreciation of the paper and made metal only a subsidiary money. If an effort had been made to keep the circulation saturated with coin by continuing the prohibition upon notes below £5, the depreciation of the paper would have been quickly felt by the disappearance of gold and accurately measured by the premium upon gold. The fact that the paper was maintained at a substantial parity with gold for nearly ten years while gold disappeared from circulation, misled those who did not look to the simple and indisputable facts regarding the foreign exchanges which were stated in the celebrated Bullion Report of 1810. Silver had been rapidly disappearing from circulation for some years, because the English mint ratio gave it a less value in relation to gold than the market price. The country bankers were authorized by the restriction laws to redeem their notes in Bank of England notes in exactly the same manner as they had formerly done in specie, so that the expansion and contraction of the country note issues was in a measure placed in the hands of the central bank as well as the control of its own circulation.

Bullion rapidly accumulated in the bank after the suspension of specie payments and the bank announced their willingness on January 3, 1799, to redeem sums under £5 and to pay in full after February 1st, notes for £1 and £2, dated prior to July 1, 1798.[1] The bank then held £7,000,000 in coin and bullion and had increased its note issues to £16,000,000. The government were not willing to take the risk of resumption and continued the restriction even after the peace of Amiens,

[1] Gilbart I., 49.

when the bank again declared that it was well supplied with cash and was ready to resume. A bill was brought in on April 9, 1802, only thirteen days after the signature of the definitive treaty, to continue the restriction until March 1, 1803, and the restriction was continued again on February 28, 1803, until six weeks after the beginning of the next session of Parliament. War broke out before this date arrived and the restriction was continued until six months after the ratification of a definitive treaty of peace. No such treaty was ratified until after the abdication of Napoleon in the spring of 1814, when the problem of restriction was again taken up.

The price of gold began to rise in September, 1799, and in June, 1800, had reached £4 5*s.* per ounce, which was about seven shillings above the mint price.[1] Exchange with Hamburg fell and the unfavorable state of the exchanges was made an excuse for postponing the resumption of specie payments after the peace of Amiens. The fact that the unfavorable exchange was due to the depreciation of the currency was denied or evaded by the Parliamentary leaders and Mr. Addington, the Chancellor of the Exchequer, urged that the restriction be continued because, "for several months past, there has been a trade carried on for purchase of guineas with a view to exportation."

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[1] The mint price of gold was £3 17*s.* 10½*d.*, which was four and a half pence above the market price, in order to cover the cost of coinage and the loss of interest while the bullion was detained in the mint. The value of gold coins was fixed as they exist to-day in 1717, when it became necessary, upon the recommendation of Sir Isaac Newton, to reduce the coining value of the gold in the guinea to arrest the exportation of silver. The reduction made the ratio of gold to silver about fifteen and a quarter to one, but as the ratio in France and Holland was about fourteen and a half, it continued to be profitable to export silver from England to those countries and to import gold into England. Silver disappeared from circulation, gold became the sole metallic medium of exchange, because it was the cheaper metal at the legal ratio, and the law of 1816, which gave England the gold standard, simply recognized in law what had been the fact prior to the suspension of cash payments.

An object lesson in the effects of a depreciated currency was afforded the English people by the condition of affairs in Ireland, which had a currency of her own. The Irish shilling contained thirteen pence, and as the pound, both English and Irish, contained two hundred and forty pence, English money was more valuable than Irish in the proportion of £100 to £108 6*s.* 8*d.* The par of exchange between England and Ireland was therefore called eight and one third. The Bank of Ireland was directed to suspend specie payments at the same time as the Bank of England, and exchange was maintained at a point favorable to Ireland until the autumn after the passage of the restriction act in England. Exchange then began to fall, which made it unfavorable to Ireland, until in January, 1804, it had reached a depression of £18 in the hundred. The bank had been increasing its issues until they were more than four times the amount at the time of the restriction. A committee of Parliament was appointed in 1804 to consider the subject and they found that the exchanges were nominally unfavorable because of the depreciation of the Irish paper. The directors of the Bank of Ireland who appeared before the committee would not admit that this was the case and maintained that the large issues of paper money were to supply the place of gold which had been taken out of the country to pay remittances. One of them advanced the same extraordinary doctrine advanced a few years later in England, that "the mere buying of gold at an advanced price beyond that of the mint, is the effect, and not the cause of the exchange, and, therefore, no proof of the depreciation of the paper itself."

The committee refused to be misled by this sort of argument and found that the real exchange, when allowance was made for the depreciation in the paper, was favorable to Ireland. A convincing proof that it was so, if there were no others, was found in the fact that the exchanges between England and Belfast were favorable to Belfast, because payments at Belfast were made in specie, at the very moment that they were unfavorable at Dublin, where paper was the standard. Still further demonstration of the simple mathe-

matical proposition, that the fall in the exchange was measured by the depreciation in the paper money, and not by any cause common to Irish industry or banking, was afforded by the fact that there was a local difference of exchange between Dublin and Belfast, which put specie at a premium of ten or twelve per cent. in Dublin, while it passed at par in Belfast as the only medium of exchange.[1] The committee recommended that the relations between the currencies of the two countries be simplified by making the notes of the Bank of Ireland payable in Bank of England paper and that the Bank of Ireland establish a fund in London for that purpose. Little attention seems to have been paid to this report and the recommendation that the currencies be assimilated, which was made by Mr. Parnell in Parliament in 1809, was rejected without a division.

The depreciation of the Bank of England notes did not advance rapidly until the period of commercial speculation which caused the panic of 1810. The price of gold in bank paper, which had risen to £4 5*s.* per ounce in 1800, fell back to about £4, representing a depreciation of two and a half shillings or about three and two-tenths per cent., and remained at substantially this figure until 1809. The price of gold rapidly advanced during the following year until the mint price of gold was £4 11*s.* or a depreciation of 17.4 per cent. Exchange with Hamburg had been falling with the depreciation of the currency and on February 1, 1810, Mr. Horner moved for several accounts relating to the currency and exchanges. The committee was then appointed whose work has become so famous in the literature of finance as the Bullion Report. The committee, in an endeavor to ascertain the true cause of the unfavorable exchanges, examined a large number of witnesses, including directors of the Bank of England, private bankers, business men, and students of finance. The conclusions of the committee, however, were directly adverse to the opinions of the bankers and in accordance with those of the most enlightened students of the abstract problems of finance and political economy.

[1] MacLeod, *Theory and Practice of Banking*, II., 14.

The report which the committee presented to the House of Commons took its place at once among the classics of finance and has been one of the guides of sound banking from that time to this. It is a remarkable fact that Mr. Horner was a young man of thirty-two who had never given more than a general attention to financial subjects. He simply listened attentively to the testimony of the best experts who appeared before the committee and with singular clearness of vision grasped the correct principles of regulating a banking currency and discarded the shallow sophistries and "practical rules" which were presented to him by the great bankers of London.[1] The Bullion Report is remarkable not only for the clearness and precision with which it lays down the fundamental rules for regulating the volume of a paper currency, but for the discriminating judgment with which it discusses limitations of the then existing theories of prices and currency which only came to be generally accepted by political economists a generation later and have not been accepted by all of them to-day.[2]

The undisputed facts upon which the bullion committee based their report are summed up by Professor MacLeod as follows[3]:

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[1] M. Juglar remarks that, "There is always something which blinds those the best placed to see, and it is not the persons engaged in affairs who are the best judges of the mechanism they direct or which, rather, sweeps them along."—*Des Crises Commerciales*, 341. For similar views see Price, *Currency and Banking*, 3-4; Bagehot, *Lombard Street*, Works, V., 112–15.

[2] Mr. Horner himself expressed a modest opinion of the literary merits of the report, but declared that it possessed one great merit, "That it declares in very plain and pointed terms both the true doctrine, and the existence of a great evil growing out of the neglect of that doctrine." Portions of the report were written by Mr. Huskisson and Mr. Thornton, but the inspiring spirit was largely Mr. Horner's. The views set forth were not new and had been so clearly stated by Mr. Ricardo in his pamphlet on "The High Price of Bullion," that some of Mr. Ricardo's friends accused Mr. Horner of borrowing the ideas without proper credit.

[3] *Theory and Practice of Banking*, II., 29.

1. That the mint price of gold bullion, or the legal standard of the coin was, £3 17*s.* 10½*d.* per ounce.

2. That the market price of gold bullion was then £4 10*s.* per ounce.

3. That the foreign exchanges had fallen to an enormous extent: that with Hamburg, nine per cent., that with Paris 14 per cent.

4. That the increase of bank-notes had been very great during the last few years, and was rapidly augmenting.

5. That specie had disappeared from circulation.

The report made by the committee was divided into four parts, the first dealing with the causes of the high price of gold; the second, with the state of the foreign exchanges and the reason why they were adverse to England; the third, with the conduct of the Bank of England in the regulation of its note issues; and the fourth, the increase in circulation of the Bank of England and of the country banks and the increase of their discounts.

The demonstration was easy to intelligent and unprejudiced observers that the high price of gold was the measure of the depreciation of the bank paper. The contention of some of those who declared that bank paper had not depreciated, but that gold had risen in value because of its scarcity, grew out of a muddy confusion of ideas regarding the relations of prices to the two standards of gold and paper. The committee showed that the question of prices had no relation to the difference between the mint price and the market price of gold. The paragraph in which they made this clear is as follows:

An ounce of standard gold bullion will not fetch more in our market than £3 17*s.* 10½*d.*, unless £3 17*s.* 10½*d.*, in our actual currency is equivalent to less than an ounce of gold. An increase or diminution in the demand for gold, or what comes to the same thing, a diminution or increase in the general supply of gold, will, no doubt, have a material effect upon the money prices of all other articles. An increased demand for gold, and a consequent scarcity of that article, will make it more valuable in proportion to all other articles; the same quantity of gold will purchase a greater quantity of any

other article than it did before ; in other words, the real price of gold, or the quantity of commodities given in exchange for it, will rise, and the money prices of all commodities will fall; the money price of gold itself will remain unaltered, but the prices of all other commodities will fall. That this is not the present state of things is abundantly manifest; the prices of all commodities have risen and gold appears to have risen in its price only in common with them.

Another proof that it was not the scarcity of gold, but the depreciation of paper, which increased the market price of gold in paper was the fact "that both at Hamburg and Amsterdam, where the measure of value is not gold as in this country, but silver, an unusual demand for gold would affect its money price, that is, its price in silver ; and that as it does not appear that there has been any considerable rise in the price of gold, as valued in silver, at those places in the last year, the inference is, that there was not any considerable increase in the demand for gold." The committee also called attention to the fact that on previous occasions "the excess of the market price of gold above its mint price was found to be owing to the bad state of the currency ; and in both instances, the reformation of the currency effectually lowered the market price of gold to the level of the mint price." By parity of reasoning, the reformation of the existing paper currency would lower the price of gold to the level of the mint price, without regard to the quantity of commodities which either form of currency might purchase.

The high rate of exchange against England, as expressed in paper currency, was explained by some of the witnesses as being due to a large balance of payment due from England to other countries, either on account of imports of merchandise or expenditures abroad on account of military supplies and subsidies. The committee, however, pointed out that it had "been long settled and understood as a principle, that the difference of exchange resulting from the state of trade and payments between two countries is limited by the expense of conveying and insuring the precious metals from one country to the other ; at least, that it cannot for any considerable length of time exceed that limit.

The real difference of exchange, resulting from the state of trade and payments, never can fall lower than the amount of such expense of carriage, including the insurance." If proof were needed of this simple proposition, it was furnished by the answers given to the searching questions of the committee by Mr. Greffulhe, regarding the actual rate of exchange in coin. "From these answers of Mr. Greffulhe, it appears," said the committee, "that when the computed exchange with Hamburg was 29, that is, from 16 to 17 per cent. below par, the real difference of exchange, resulting from the state of trade and balance of payments, was no more than five and a half per cent. against this country." The committee concluded, therefore, that after making the necessary allowances for the balance of trade and payments, there still remained a fall of 11 per cent. in the exchange with Hamburg "to be explained in some other manner."

Mr. Harman, one of the directors of the bank, declared before the committee, "I must very materially alter my opinions before I can suppose that the exchanges will be influenced by any modification of our paper currency." The committee furnished him in their report the evidence of the depreciation of the Scotch currency, when the optional clause of payment was inserted after the Seven Years' War; the depreciation of Irish currency six years before; and the depreciation of the notes of the Bank of England itself three years after its foundation. The committee then declared:

> Under the former system, when the bank was bound to answer its notes in specie upon demand, the state of the foreign exchanges and the price of gold did most materially influence its conduct in the issue of those notes, though it was not the practice of the directors systematically to watch either the one or the other. So long as gold was demandable for their paper, they were speedily apprised of a depression of the exchange, and a rise in the price of gold, by a run upon them for that article. If at any time they incautiously exceeded the proper limit of their advances and issues, the paper was quickly brought back to them, by those who were tempted to profit by the market price of gold or by the rate of exchange. In this manner the evil soon cured itself.

The committee, in taking up the question of excessive

issues, made the discriminating admission, "that the mere numerical return of the amount of bank-notes out in circulation cannot be considered as at all deciding the question whether such paper is or is not excessive. It is necessary to have recourse to other tests." The economy of money was referred to which had taken place in late years, by "the increased use of bankers' drafts in the common payments of London; the contrivance of bringing all such drafts daily to a common receptacle, where they are balanced against each other; the intermediate agency of bill-brokers; and several other changes in the practice of London bankers." Notwithstanding this, the committee found an approximate increase between 1808 and 1809 of £3,095,340 in country bank-notes, and about £1,500,000 in Bank of England notes. The suspension of cash payments imposed no other expense upon the issuers of this paper than the printing of the notes and some £100,000 in stamp taxes. The committee, therefore, asserted their conclusions, "That there is at present an excess in the paper circulation of this country, of which the most unequivocal symptom is the very high price of bullion, and next to that, the low state of the Continental exchanges; that this excess is to be ascribed to the want of a sufficient check and control in the issues of paper from the Bank of England; and originally to the suspension of cash payments, which removed the natural and true control."

The Bullion Report was presented by Mr. Horner to the House on June 9, 1810, but was not taken up for consideration until May 6, 1811. The debate was opened by Mr. Horner, who spoke for three hours and closed by moving a series of sixteen resolutions. These resolutions declared that when Parliament passed the restriction act, it had no intention that the value of the bank-notes should be altered, but that they had for a considerable time been below their legal value, and that the extraordinary depression of the foreign exchanges was in great part due to the depreciation of the currency of England relative to that of other countries. The final resolutions declared that the only method of preserving the paper currency at its proper value was to make it paya-

ble on demand in the legal coin of the realm, and that cash payments ought to be resumed at the end of two years. The report was ably supported by Mr. Henry Thornton, but was assailed by Mr. Rose, Mr. Vansittart, and others. Mr. Vansittart maintained that "a standard in the sense used by these gentlemen, namely, a fixed and invariable weight of the precious metals as a measure of value, never existed in this country." His idea was that the pound sterling was a sort of intangible thing, and that the paper pound was not to be considered as depreciated so long as it formed the current medium of exchange, and was accepted in the discharge of obligations. The effort was made by the defenders of paper money to deny any difference between gold prices and paper prices, but it was disclosed in the course of the debate that the government themselves were making a distinction by paying guineas to the soldiers in Guernsey at the value of 23 shillings, although their legal value was only 21 shillings.

The country was not ready to return to a specie basis, and Mr. Horner's first resolution was defeated by a vote of 75 in the affirmative to 151 in the negative, and his final resolution by a vote of 45 to 180. Mr. Vansittart followed up his victory by a series of resolutions, to the effect "That the promissory notes of the Bank of England have hitherto been, and are at this time held to be, equivalent to the legal coin of the realm," and that the price of bullion and the state of the foreign exchanges were in no way due to excessive issues of bank paper. Notwithstanding the protests of the better informed members of the House, an amendment by Mr. Canning was rejected, 42 to 82, and Mr. Vansittart's astounding resolutions were carried.

The opponents of the Bullion Report laid stress upon the fact that gold was not sold openly at a premium. The reason was the belief that it was a penal offence to part with a bank-note for less than its face value in bullion, and at the very moment of the debate on Mr. Horner's report three men were lying in prison for selling guineas for more than twenty-one shillings under an old statute of Edward VI.

The issue soon after came before the Court of Common Pleas and they unanimously quashed a conviction under the law and declared that it was no crime to sell guineas at a premium. Lord King in March, 1811, issued a circular to several of his tenants, reminding them that their contract was to pay a certain quantity of the legal coin of the country, and that, as the paper currency was considerably depreciated, he should in future require his rents to be paid in the legal coin of the realm, in Portugese coin of equal weight, or by a sufficient amount of bank-notes to purchase the necessary weight of standard gold. This attempt to establish a gold price distinct from the paper price of commodities caused a tempest of rage among the advocates of a paper currency and led to the charge againt Lord King, so much bandied about in France, of incivism. A bill was promptly introduced into Parliament by Lord Stanhope, making it a misdemeanor to make any difference in payments between guineas and bank-notes. The measure passed the House of Lords by a vote of 43 to 16, and the House of Commons by a vote of 95 to 20.

The disasters to the country banks during 1815 and 1816 greatly reduced the volume of paper afloat and made way for additional issues by the Bank of England. The reduction in country bank paper in circulation is estimated by Professor MacLeod [1] at three times the amount of the issue of the Bank of England, and the effect was immediately felt in the rise in value of Bank of England notes. The market price of gold in paper fell from £5 6*s*., in May, 1815, to £3 18*s*. 6*d*., or within three per cent. of par, in October, 1816. Foreign exchange rose in a corresponding degree, and these rates prevailed until the mid-summer of 1817. The bank had been preparing during the peace in 1815 to resume specie payments and were able after the final overthrow of Napoleon to announce, in November, 1816, that they would pay all notes dated previous to January 1, 1812, and that in the following April they would pay all notes dated before January 1, 1816. Resumption was thus almost accomplished

[1] *Theory and Practice of Banking*, II., 62.

and the people were found to be so accustomed to a paper currency that little demand was made for gold and many persons who had hoarded gold presented it for exchange in bank-notes.

Cash payments were not yet established by law, however, and the restriction had been continued, after Napoleon's return from Elba, until July, 1818. The return of peace brought a great many foreign borrowers to England. Prussia, Austria, and other states were endeavoring to obtain gold to reform their currencies. The result was a heavy drain upon the gold reserve, which had reached £11,914,000 in October, 1817, and the reappearance of a premium upon coin and bullion.[1] Advances to the government were increased from £20,000,000 to £28,000,000 and the bank made no effort to restrict their issues, in the face of the foreign drain and a new increase in the circulation of the country banks. It was perfectly evident that specie payments could not long be maintained with the paper price of gold at £4 3*s*., or about seven per cent. premium, and committees were appointed on February 3, 1819, by both houses of Parliament to inquire into the state of the bank. They reported in favor of a further suspension of specie payments and a bill for the purpose became law on April

[1] The question was much discussed by the orthodox believers of the classical school of political economy, why prices of commodities did not fall with the export of gold and invite foreign purchasers of English merchandise. As Prof. Sumner puts it (*History of American Currency*, 264), "If all nations used specie, or even paper and specie, in only due proportion it would be as impossible for one nation to be drained of specie as for New York harbor to be drained of water by the tide." But all nations do not use specie only, but credit, and modern experience has demonstrated that prices do not move up and down with gold exports and imports, but under the operation of much wider causes in the credit market. The Bank of England did not employ at this time the method of protecting its cash by raising the rate of discount, and the orthodox theory of price movements was of no practical avail against the operation of special causes which drew off gold. See an outline of the discussion in *Money*, by Francis A. Walker, 356–58.

5th. The bill forbade the bank to make payments in gold either for fractional sums or for any of their notes during the session of Parliament. The committees then addressed themselves to a full hearing regarding the bank management and the best means of resuming specie payments upon a secure basis.

The testimony taken by the committees indicated a marked advance in sound opinion among bankers and business men since the adoption of the comic resolutions of Mr. Vansittart. Nearly all the witnesses admitted the influence of the irredeemable circulation upon the foreign exchanges and the necessity of curtailing the circulation when the exchanges became unfavorable and the automatic regulation of redemption in coin on demand was lacking. The majority of the bank directors were not convinced of the wisdom of these views until several years later, but Sir Robert Peel changed his opinion completely and found a powerful supporter in Lord Grenville, who was a member of the Cabinet which originally proposed the restriction act. Lord Grenville went so far as to declare that he considered the restriction one of the greatest calamities under which the country labored and to deplore the part which he had himself taken when it was proposed. While the bank was enabled by the act to lend money with one hand, he declared, it was with the other shaking the foundation of contracts, affecting prices, and involving the country in distress and individuals in ruin ten times greater than any benefits they could derive from liberal issues.

Both houses concurred in the passage of a bill for the gradual resumption of specie payments by the reduction of the mint price of gold. It was provided that after February 1, 1820, the bank should be required to deliver gold of standard fineness in quantities of not less than sixty ounces at £4 1*s.* per ounce; that after October 1, 1820, the rate should be reduced to £3 19*s.* 6*d.*, and after May 1, 1821, to the mint price of £3 17*s.* 10½*d.* per ounce. The provision for payment in bullion was adopted so as to prevent a run upon the bank for coin by small note-holders, while it established

substantial coin redemption when the bullion came to be delivered at the mint price.[1] This liability to pay in bullion was to continue until May 1, 1823, after which full redemption in coin on demand was to be required. The statutes restricting the trade in gold coin and bullion were repealed and Mr. Pitt's practice of free borrowing from the bank was cut off by an act forbidding advances of any description without the express authority of Parliament. It is probable that the bank would have been able to resume cash payments without authority of legislation, within the time which the act required, but its passage by Parliament did much to educate and crystallize public opinion and to protect the bank during the attacks upon the resumption act which were made within the next few years.

The accumulation of gold in the Bank of England was so rapid that it became possible to pass an act in 1821 permitting full resumption on May 1, 1821. The government repaid £10,000,000 of its obligations to the bank and specie payments were resumed in coin at the date fixed by law. The bad harvests and commercial collapse led to several attacks upon the resumption act in Parliament in 1822 and 1823, but they were rejected by large majorities. It was pointed out in the course of the debate that the low price of wheat, which was a great cause of discontent among the agricultural class, could not well be due to the alleged contraction of the currency, for a greater decline had taken place in France, which had been steadily upon a metallic basis, and a like decline in other Continental countries where depreciated paper was still the medium of circulation. The price of wheat at Vienna, in spite of the large volume of the Austrian paper currency, had dropped from 114*s.* in March 1817, to 19*s.* 6*d.*, in September, 1819. It was shown also that the amount of currency in England had increased rather than diminished, for the paper issues had not been materially reduced and a large mass of coin had been infused into the circulation. The only concession obtained by the opponents

[1] Levi, 137.

of resumption was the statute of 1822 (Chapter 70), authorizing country bankers to continue the issue of notes for £1 until the expiration of the charter of the Bank of England in 1833. The permission to issue £1 notes, which had been given to the Bank of England in 1797 and continued during the entire period of restriction, was withdrawn by the resumption acts.

The effect of the monopoly of the Bank of England, which deprived any corporation or large firm of the power to issue notes, but left the power to firms of six persons or less, was the subject of severe criticism every time that the small country banks were swept away in a period of industrial depression. The success of the Scotch banking system was attracting attention and English financiers were desirous of adopting it in England. It was supposed, however, down to 1823, that no joint stock bank could be lawfully established in England because of the exclusive privileges conferred upon the Bank of England by the Act of 1742. It was found, upon careful inspection of the act, and having in view the rule of law that a penal statute must be construed strictly, that the restrictions were limited in their application to banks of issue. The failure to make any distinction up to this time between the power to establish joint stock banks for the purpose of issuing notes and the power to establish them for other purposes was due to the early impression that banking could not be carried on without the issue of notes. The London private bankers had for thirty years suspended the use of circulating promissory notes, but the tradition lingered that joint stock banks could not be established without infringing the legal monopoly of the Bank of England. Mr. Joplin in a pamphlet issued in 1823 announced his discovery that the charter of the bank "does not prevent public banks for the deposit of capital from being established."[1]

There was natural hesitation, even after this discovery, to embark in joint stock banks of deposit without specific authority of law, but the discovery probably had something

[1] MacLeod, *Theory and Practice of Banking*, II., 381.

to do with wringing concessions from the Bank of England and improving the existing system. The government proposed to the bank in 1823 that it consent to the creation of joint stock banks of issue at a distance of sixty-five miles from London, upon condition of the extension of the bank charter for ten years. This proposition was rejected, but the subject was revived after the dreadful panic of 1825. The time for the renewal of the charter was drawing nearer and the bank consented to the Act of 1826, establishing joint stock banks of issue beyond the radius of sixty-five miles from London and requiring the bank to establish branches. These joint stock banks were authorized to issue notes, but they were not to issue them within the prescribed distance nor to draw upon their London agents any bill of exchange payable on demand or for any less sum than £50. A sworn list of the shareholders and places for carrying on business was required of the new banking companies, but few restrictions were imposed as to their management, capital, or cash reserve.

Few joint stock banks were formed for the first few years after the Act of 1826, as the leading country bankers already had private banks and had no wish to set up powerful rivals. The Bank of England managers clung to the monopoly of banking in London, even after they had conceded freedom beyond the sixty-five mile radius, and begged Lord Althorp, when the charter was renewed in 1833, to insert a clause clearly preventing the formation of joint stock banks in the City. Lord Althorp, having obtained the opinion of the law officers of the Crown, in favor of the right to set up deposit banks, refused to impose new restrictions and tartly reminded the directors of the bank that the bargain was that their privileges should remain as they were,—not that they should be extended.[1] A clause was inserted in the Act of 1833, specifically declaring that any body politic or corporate or partnership might carry on the business of banking in London or within sixty-five miles thereof, provided they did

[1] MacLeod, *Theory and Practice of Banking*, II., 384.

not issue notes payable on demand. It was not until after this act that it was seriously attempted to set up a joint stock bank in London. The history of these banks is not a part of the history of banks of issue, but it is an interesting fact that the first was the London and Westminster Bank, which was originally formed as a private partnership and whose manager was Mr. James W. Gilbart, the author of one of the most complete and intelligent works on English banking. Joint stock banks of issue were formed in considerable numbers in the prosperous years preceding the panic of 1836, and more than forty were established in the spring of the latter year. The number issuing notes when the restrictive Act of 1844 took effect was 72, of which only 14 still retain the privilege.

The Bank of England opened its first branches at Gloucester, Manchester, and Swansea. The branches were able to compete on favorable terms with the country banks and to discount bills at four per cent., where the old banks charged five per cent. and sometimes an additional commission. The principal advantage which the country bankers retained was the payment of interest on deposits, but they felt keenly the competition of the branch banks and held a meeting as early as December 7, 1826, to consider it. They adopted resolutions that the establishment of branch banks "have the evident tendency to subvert the general banking system that has long existed throughout the country, and which has grown up with, and been adapted to, the wants and conveniences of the public." A deputation was sent to the Chancellor of the Exchequer, who promised to give serious consideration to their views. Further cause of complaint was found in the stamp duties, which were levied upon the country bank-notes according to value, while a fixed sum was accepted from the Bank of England for their entire issues. The result, according to the country bankers, was to subject them to a tax of £650 on £10,000 where the bank paid only £35. This protest resulted in an act extending the privileges of the Bank of England to the country banks, but the general protests against the branches were

answered by the assurance that "the interest of the country bankers should not be neglected in any negotiation between the government and the Bank of England for the renewal of the bank charter." [1]

The extension of country banking, without any legal regulation, was popularly regarded as one of the causes of the panic of 1825 as well as of some of the earlier panics. The issue of small notes by the country banks was treated by eminent statesmen as an especially dangerous feature of country banking and as having a tendency to expel coin from the circulation. Many of these notes were retired by the insolvency of the issuers in the panic of 1825 and the ministry seized the opportunity to propose their prohibition for the future. They took steps, without waiting for Parliament to act, to prohibit the issue of the required stamps for £1 and £2 notes and the Chancellor of the Exchequer made an early motion in Parliament that no notes be issued in the future under £5. The proposition became law and after a sharp contest was extended in 1828 to Scotch notes circulating in England.[2]

The approach of the date fixed for the expiration of the bank charter,—at the end of one year's notice after August 1, 1833,—led to the appointment of a committee of the House of Commons May 22, 1832, to consider the privileges to be granted in the extended charter. The witnesses examined discussed the propriety of establishing joint stock banks in London (which most of them opposed), the publications of the accounts of the bank, the regulation of the circulation, and the rate of discount. The subject of making the bank-notes legal tender except at the bank was also considered and the change was urged upon the ground that the notes could then be used by the country banks in the redemption of their own notes in times of panic and the demand for gold diminished. Lord Althorp moved the resolutions for

[1] Gilbart, I., 70–73.

[2] The history of Scotch and Irish banking will show that the effort made at this time, to deprive those countries of the use of small notes, was defeated.

the renewal of the charter on May 31, 1833, and it was decided by a vote of 316 to 83 to proceed with their consideration. The proposition to make the notes legal tender except at the bank prevailed by a vote of 214 to 156.

The new charter continued the exclusive privilege of note issue within sixty-five miles of London, but authorized country banks to have agencies in London for the purpose of paying such of their notes as might be presented. The bank was authorized to reduce its capital by one-fourth of the amount of the debt of the public to the bank and in consideration of its privileges surrendered £120,000 of the amount allowed annually by the government for the management of the debt.[1] The charter of the bank was extended to one years' notice, to be given within six months after the expiration of ten years from August 1, 1834, and until repayment of all debts due by Parliament to the bank. The renewal of the charter in 1844 extended the life of the bank until twelve months' notice after August 1, 1855, and the repayment of the public debt. No such notice was given and the bank continued to operate under this authority until 1870. A revision was made at that time of the statutes relating to the public debt, and it was enacted that the Bank of England shall continue a corporation until all the public funds are duly redeemed by Parliament.[2]

The period following the crisis of 1839 developed a peculiar doctrine of finance in England, which obtained a strong footing among public men with only a rudimentary knowledge of political economy and has spread to some extent on the Continent of Europe and in the United States. This

[1] The government repaid one-fourth of the permanent debt, amounting to £3,671,000, and reducing the principal to £11,015,100; but the bank never availed itself of the permission to deduct the amount from its capital, which remains at £14,553,000, where it was fixed in 1816. The interest on the debt to the bank was reduced in 1892 from three to two and three-fourths per cent., and changes were made in the allowances for managing the debt which made the total saving to the government £45,700.—London *Bankers' Magazine*, July, 1892, LIV., 50.

[2] Clause 72, Act 33 and 34 Victoria, c. 71.

doctrine embodies the ideas that bank-notes are a form of currency entirely distinct from other commercial paper and forms of credit; that an expansion of bank-note issues, even when redeemable in coin on demand, is a potent cause of commercial crises; and that the way to prevent crises is to place fixed limits upon bank-note issues. Few advocates of this theory have undertaken to place definite limits upon the volume of bills of exchange or of other forms of commercial paper issued by solvent borrowers, but they have maintained that bank-notes were money for all practical purposes of daily use; that an undue expansion in the volume of money has stimulated speculation and expelled gold under the operation of Gresham's law; and that the curtailment of note issues would maintain sobriety in the mercantile world and restore the equilibrium of the foreign exchanges.

The advocates of this view, of whom the most conspicuous were Sir Robert Peel, Lord Overstone, and Colonel Torrens, named their new discovery "The currency principle," and immediately set out to rescue the commercial world of Great Britain from future disturbance by enforcing their policy in a modified form upon the Bank of England. Sir Robert Peel declared, in advocating the resumption act of 1819, that it was impossible to prescribe any specific limitation of issue for the bank and that the quantity of circulation which was demanded in a time of confidence varied materially from the amount required in a period of despondency. He became a complete convert to the currency principle in 1844 and introduced the bill which became the basis of the present charter of the Bank of England. The theory of the currency principle was so generally accepted as a means of putting an end to panics that amendment was refused by the House of Commons by a vote of 185 to 30, and the bill passed the House of Lords without a division, and received the royal assent on July 19, 1844. The bill absolutely cut off the creation of banks of issue, except by the union of existing banks, and made the future elasticity of English currency dependent upon deposits of coin or bullion with the Bank of England.

The new charter provided for the separation of the issue department from the banking department of the Bank of England and placed the issue department under the charge of a committee of the directors appointed by the entire body. The Governor was directed to transfer to the issue department on August 31, 1844, securities to the value of £14,000,000, of which the debt due by the government to the bank was to be a part. The bank was also to deliver to the issue department such of the gold coin and bullion as was not required for the banking department and was to receive back a quantity of notes which should make the circulation of the bank exactly equal to the coin and bullion on deposit, plus the sum of £14,000,000 represented by securities.[1] Thenceforth the issue department was to pay coin and bullion for notes and issue notes for coin and bullion, and no department of the bank was authorized or permitted to issue notes in excess of the limits thus established. The price of gold at the bank was fixed for the future at £3 17*s.* 9*d.* per ounce. Weekly accounts of the circulation were to be transmitted to the government and published in the *London Gazette*. The bank was required to pay £180,000 annually for its privileges instead of the rate of £120,000 fixed in 1833. This payment was modified in 1861 and now amounts to about £200,000.

The purpose of fixing the amount of notes covered by securities at £14,000,000 was to economize that amount of gold without impairing the convertibility of the note. The amount was arrived at, not with any special regard to the capital of the bank or the government debt already held, but with regard to the smallest amount of Bank of England

[1] Whether the notes constitute a prior lien on the securities and bullion in the issue department is a point which is not clearly set forth and has never been judicially decided. The act directs that "there shall be transferred, appropriated, and set apart by the said governor and company to the issue department securities to the value of £14,000,000"; but "it shall be lawful for them to diminish the amount of such securities," which seems to preclude the idea that they are not part of the general assets of the bank.—Price, 65.

notes which could be counted upon to remain always in circulation. It was found that the net circulation in December, 1839, was £14,732,000, and it was argued that at least £2,000,000 more must be kept in the banking reserve of the bank. It was considered safe, therefore, to fix the uncovered circulation at £14,000,000 and it was left to the play of the foreign exchanges to control the fluctuations above that amount.[1] Gold imported under the attraction of low prices and high interest rates would be brought to the bank and exchanged for notes, under the theory of the framers of the act, and gold withdrawn from the country by the attraction of low prices and high interest rates elsewhere would be taken from the bank by the presentation of notes, which would thus be withdrawn from circulation.

The principle of issuing notes covered by other securities than coin, within the safe maximum limit of the amount which can be kept permanently in circulation, is a simple and intelligible banking principle, and indeed the principle upon which modern banking is founded. The declared purpose of the act—"to cause our mixed circulation of coin and bank-notes to expand and contract, as it would have expanded and contracted under similar circumstances had it consisted exclusively of coin,"—also seemed simple and intelligible to those who ignored the existence of credit and the domestic causes which made a larger circulation desirable at some periods than at others. The Act of 1844 proposed substantially to destroy the bank-note as an instrument of credit and make it a mere certificate of coin, leaving to other forms of commercial paper the functions which the bank-note had in part performed. It is obvious, however, that the framers of the act, in fixing a maximum limit of authorized circulation, meant to deal only with the conditions then existing and that, if their theory had proved operative, they could not have objected to a much higher limit to meet the expanded volume of modern trade.

Existing private and joint stock banks of issue were permitted, with the usual respect of English law for vested

[1] Mr. Torrens, quoted by Hankey, 5–8.

rights, to continue their outstanding circulation. It was the purpose and expectation that these banks would gradually be led to retire their circulation and remit the power to the central bank of issue. Provision for this contingency was made by the authority given the bank to increase the amount of securities in the issue department to an amount not exceeding two-thirds of the country bank-notes withdrawn and to issue circulation against the new securities.[1] The new issues did not fall to the bank automatically, but required an order from the Crown in Council. The amount of circulation allowed the country banks was determined by the average circulation during the twelve weeks preceding April 27, 1844, and the amount was found to be £5,153,417 for the 207 private banks and £3,478,230 for the 72 joint stock banks. It was not until December 13, 1855, that any increase was made in the secured circulation of the Bank of England. Forty-seven banks with aggregate issues of £712,623 had ceased to issue their notes since the Act of 1844 and an order was made authorizing the increase of the Bank of England issue by £475,000. The next increase was £175,000 in 1861, and the next £350,000 in 1866, increasing the issues upon securities to £15,000,000. An increase of £750,000 was made April 1, 1881; £450,000 September 15, 1887; £250,000 February 8, 1889; £350,000 January 29, 1894; £975,000 March 3, 1900; £400,000 August 11, 1902; £275,000 August 10, 1903. The secured circulation, therefore, now stands at £18,450,000 ($90,000,000). Lapsed issues up to 1914 were £8,126,445,—£4,818,802 for 197 private banks and £3,307,643 for 67 joint-stock banks.

No provision was made for strengthening the security of the issues of private banks, except the absolute limit put

[1] The limitation to two-thirds of the cancelled issues was based upon the theory that these issues had been protected by one-third their amount in bullion, which would be released for circulation, thus keeping the amount of circulation intact. The utter disregard of banking principles embodied in the law is indicated by this assumption, which completely ignores the necessity for a reserve against general liabilities.—Gilbart, II., 100.

upon the amount, for it was not intended to foster their development. A banker who ceased to issue his own notes was not permitted to resume the issue, and if two or more banks became united and the number of partners of the united bank exceeded six their power of note issue was to cease. The country bankers were required to permit their books to be inspected by a government officer, but this was apparently to prevent an excess of issue rather than to afford any other sort of security to the public. The country banks have been slow to leave the field, as the figures of their circulation demonstrate. Fifty-six private banks were still issuing £2,220,048 and 35 joint stock banks were still issuing £1,974,202 in notes at the beginning of 1896; but by 1914 the number had fallen to eight private banks and six joint stock banks, with issues respectively of £334,615 and £170,587. These notes are not legal tender and the banks issuing them are not required to publish accounts.

The operation of the Bank Act of 1844 was put to an early test by the crisis of 1847 and the result was a complete failure upon two essential points. The operation of the act neither prevented the speculation which is the cause of panics, nor reduced the issue of notes to correspond with the export of gold. Inquiries were made by both the House of Commons and the House of Lords, at the meeting of Parliament after the panic and the friends of the Act of 1844 made an earnest effort to rescue it from the discredit which the panic had cast upon it. The committee of the House of Commons reported in favor of continuing the act in effect, but the House of Lords' committee spoke in severe terms of its operation. The failure of the act in the important respect of preventing commercial convulsions was frankly admitted in the debate in the Commons by Sir Robert Peel. It had neither "put a check on improvident speculation," in the language of the Lords' committee, nor afforded "security against violent fluctuations in the value of money." The law was framed to arrest commercial expansion by limiting the means for carrying on commercial transactions. It failed absolutely in this object, because such operations can

be carried on, and usually are carried on, by other means than bank-notes. It succeeded in checking the expansion only when other forms of credit had been swept away by distrust and expansion of note issues to fill their place was absolutely needed to prevent overwhelming commercial disaster. It did not prevent expansion, in simple terms, when expansion might do harm ; it prevented it absolutely when it might have done good.

It was the theory of the supporters of the act, that the currency would fluctuate in exact accordance with the fluctuations of a metallic currency by the self-acting provision for the issue of notes only in exchange for gold and the issue of gold in exchange for notes. Both sides in the discussion of the bill, when it was pending in Parliament, seem to have made the incredible blunder of overlooking the fact that gold could be obtained by the presentation of checks. This was exactly what happened in 1847 and the effect upon the outstanding note issues and the bullion in the bank at different dates during the April pressure is indicated in the following table :

	NOTES HELD BY THE PUBLIC.	NOTES IN THE BANKING RESERVE.	BULLION IN THE BANK.
Aug. 29, 1846	£20,426,000	£9,450,000	£16,366,000
Dec. 19, 1846	19,549,000	8,864,000	15,163,000
Jan. 9, 1847	20,837,000	6,715,000	14,308,000
Feb. 20, 1847	19,482,000	5,917,000	12,215,000
Mar. 20, 1847	19,069,000	5,419,000	11,232,000
Apr. 10, 1847	20,243,000	2,558,000	9,867,000

The bank, therefore, saw its bullion decreasing on the one hand and its banking reserve decreasing on the other hand, while gold and notes poured out of the banking department in the discharge of its obligations. The banking reserve was chiefly in notes which had been obtained by the surrender to the issue department of such gold as was received on deposit, but the payment of these notes to customers either swelled the note circulation or reduced the gold in the bank, by just the amount of the payment. The effect, as Mr. John Stuart Mill pointed out in his testimony before

the Committee of the House of Commons, was a double action, which required each department of the bank to take measures for self-protection and made the bank's action on the money market "as violent on a drain of three millions, as would have been required on the old system for one of six."[1] The banking department might be completely wrecked by the exhaustion of its note reserve, without the power it formerly possessed to draw upon the whole resources of the bank for help.

It was fortunate in many respects that the Act of 1844 failed to operate to contract the domestic circulation as was expected. Such an event would only have added to the intensity of the panic and made the suspension of the act and the issue of additional notes more imperative. Such contraction and such absence of expansion as actually occurred invited a run upon the bank for gold and notes which would not have occurred under former conditions. Bank of England notes were a legal tender except at the bank and were largely employed in the reserves of the country banks. The absolute limit on the supply had the double effect of frightening the public into withdrawing their deposits from the banks for hoarding before the supply was exhausted and of driving the banks to withdraw their deposits from the Bank of England for hoarding against this demand by the public. If they could not get notes under such circumstances, they would take gold, and the reduction of the note circulation in the meantime would only have increased the pressure. The demand for notes, so long as their convertibility was unquestioned, was, of course, immensely increased by the destruction of credit. Hoarding operated to reduce the visible quantity of notes at the very moment that the disappearance of commercial paper as a medium of circulation increased the necessity for them. The terrible pressure thus applied by the Act of 1844 to the commercial community compelled the sale of goods and securities in foreign markets at any sacrifice which would bring the ready currency withheld by

[1] *Political Economy*, B. III., Ch. xxiv., Sec. 4.

the operation of the Bank Act. The operation of the law, therefore, meant an absolute loss, not merely in the nominal sense of money denominations, but in the real sense of surrendering more English commodities for a given quantity of foreign commodities than would otherwise have been required. [1]

The chief contention which was left to the friends of the Act of 1844, after the rude disillusionment of the panic of 1847, was that the act had maintained beyond doubt "the convertibility of the note." They argued that under former conditions and in previous panics, the bank had been drained of gold as well as of its banking reserve, the two not being then separated, and that the ultimate redemption of the notes in gold had been threatened. From a practical point of view, there was perhaps some force in this claim in behalf of the act. [2] The claim is subject to the two conditions, however, that a better knowledge of the rules of banking had come into operation since the earlier panics and that theoretically the "convertibility of the note" was not perfectly assured. It is doubtful, indeed, if convertibility could have been maintained if there had never been, either in 1847, 1857, or 1866, any suspension of the Bank Act. Loss of convertibility would not have come primarily from distrust of the notes or of the credit of the bank, but from the pressure for money by depositors upon the private banks and joint stock banks which kept their reserve with the Bank of England. They would have come upon the bank with a rush for the payment of their deposits and the point might very soon have been reached where the bank had only public securities as

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[1] Gilbart, I., 337–38.

[2] Mr. Mill insists that the convertibility of the note "would have continued to be maintained, at whatever cost, under the old system," and remarks that the suspension of the banking department, "involving, as it would, the probable stoppage of every private banking establishment in London, and perhaps also the non-payment of the dividends to the national creditor, would be a far greater immediate calamity than a brief interruption of the convertibility of the note." —*Political Economy*, B. III., Ch. xxiv., Sec. 3, note.

the guarantee of its circulation. The effort, in other words, to keep the bank standing a solitary monument of unimpaired credit when every other part of the credit system of the country had fallen a mass of ruins around it could not have succeeded. This was the logical meaning of the propositions of those who insisted that the Act of 1844 maintained "the convertibility of the note," so far as they had any definite meaning, and it was a proposition which was utterly chimerical.

If the limitations of the Act of 1844 have been of any value to the English people, it has probably been in driving them to the adoption of substitutes for circulating notes and to the extension of deposit banking. England was sufficiently far advanced in 1844 in the use of instruments of credit to make the restrictions of the Bank Act of much less importance than such restrictions would have proved in a new and undeveloped country. One of the devices adopted in London for promoting the movement of capital was the Cheque Bank. Money was received by this bank on deposit, and books of checks were issued for even denominations, which might be filled in for less than the denomination but not for more. The face value of the checks issued did not exceed the depositor's credit, so that the receiver of such a check had the assurance of the bank that the depositor's account was not overdrawn. Such checks were made payable by the Cheque Bank only through some other banker and not at the counter of the bank, thereby escaping the prohibition of the law against promissory notes payable to bearer on demand. The checks passed between individuals for cash and the Cheque Bank established relations with some 1500 domestic and foreign banks which agreed to receive and cash its checks. Several railways and other companies received these checks as cash and they proved convenient for transmission through the mails.[1] The Cheque Bank, therefore, put in operation a sort of emergency currency, outside the law, if not in violation of law, which has been resorted

[1] MacLeod, *Theory and Practice of Banking*, II, 374–75.

to in other countries only under the pressure of commercial distress.[1]

A much more important and scientific step than cast-iron rules of circulation was adopted by the Bank of England for the protection of its gold reserve after the crisis of 1857. This step consisted in raising the rate of interest rapidly by degrees of one per cent. at a time, instead of fractions of one per cent., in order to arrest the export of gold. The increasing ease and cheapness of communication had destroyed the value of differences of a fraction of one per cent., when this fraction was divided into fractions of a year, in attracting gold from foreign countries or arresting its departure. The theory of statesmen and students of political economy had generally recognized up to this time only two causes of the export of gold—payments for merchandise and the pressure of a depreciated currency. The bullion brokers, without spending time over theories, had long since learned by observation that it became profitable to export gold when interest rates abroad were higher than at home. They fabricated bills of exchange, had them discounted by bankers, took the proceeds in gold and shipped the gold to the point where it would earn the highest interest. The bills fabricated for this purpose had the character of accommodation bills, in that they represented no merchandise transaction and were drawn for the single purpose of transferring money from the place where it was cheap to the place where it was dear, in order to earn the higher rate of interest.

The fact and possibility of such shipments of gold do not seem to have been known, or at least fully understood, up to this time, by the staid old merchants who formed a majority of the board of directors of the Bank of England. The necessity of meeting the drain by rapid advances in the rate of discount was first set forth in the literature of political economy by Prof. H. D. MacLeod,[2] was quickly adopted as the true theory by Mr. Goschen, and put in force by the bank

[1] For a similar device in Austria, see the closing portion of Chapter ix., first edition of this work.

[2] *Theory of Credit*, II., 813–18.

which, on this occasion, according to Mr. Bagehot, "and as far as I know, on this occasion alone," made "an excellent alteration of their policy which was not exacted by contemporary opinion, and which was in advance of it."[1] The results were even more striking than were anticipated by the advocates of the new theory, and are thus summed up for the next few years by Mr. Bagehot:

> The beneficial results of the improved policy of the bank were palpable and speedy: we were enabled by it to sustain the great drain of silver from Europe to India to pay for Indian cotton in the years between 1862 and 1865. In the autumn of 1864 there was especial danger; but by a rapid and able use of their new policy, the Bank of England maintained an adequate reserve, and preserved the country from calamities which, if we had looked only to precedent, would have seemed inevitable. All the causes which produced the panic of 1857 were in action in 1864; the drain of silver in 1864 and the preceding year was beyond comparison greater than in 1857 and the years before it; and yet in 1864 there was no panic. The Bank of England was almost immediately rewarded for its adoption of right principles by finding that those principles, at a severe crisis, preserved public credit.[2]

The great expansion of English banking after the middle of the century led to serious doubts as to the capacity of the Bank of England to maintain commercial credit in every conceivable emergency. Mr. Bagehot pointed out in his celebrated work, *Lombard Street*, more than twenty years ago, that the entire fabric of English credit rested upon the gold reserve of the Bank of England. The reserve had then increased somewhat above its level in earlier times, but was still considered by many as affording an insufficient protection for the great volume of the banking business of the country. The private and joint stock banks made no effort to maintain a coin reserve of their own, for such a policy would have locked up their capital and driven them to the wall in the fierce competition for fractional profits. They carried only such cash as was needed from day to day for ordinary transactions, and relied upon their deposits with

[1] *Lombard Street*, Works, V., 118.

[2] For a temporary failure of the new rule to act, and the reason for it, see account of the crisis of 1866. in Ch. xxiii.

the Bank of England for cash to meet emergencies. The system thus created was graphically called "the one reserve system," and under it the credit of the entire business community depends upon the solvency of the Bank of England.[1]

Under this system the deposits of other banks at the Bank of England tend to increase in times of anxiety. The joint stock and private banks, in the country as well as in the city, instead of drawing gold and notes from the centre to put in their own vaults, as is done by the banks of the United States in times of stress, obtain rediscounts at the Bank of England and carry the proceeds to their deposit accounts there, in order to be able to draw checks freely on the bank, which can be exchanged for notes, if desired. Thus, in 1857, bankers' balances increased from £3,400,000 on November 4th to £5,400,000 on November 25th. In 1866, in one week, between May 9th and May 16th, bankers' balances rose from £5,000,000 to £7,900,000, and in 1875 there was an increase from £7,274,000 on May 19th to £11,857,000 on June 2d.[2] In 1890, when separate returns were no longer published, the influence of the bankers' balances was shown by the increase of general deposits from £30,286,000 on November 12th to £36,365,000 on November 19th.

The characteristic features of English banking in recent years have been the extension of banking privileges and the consolidation and growth in power of the joint stock banks. The latter did not enjoy the privilege of limited liability in early days and refused to avail themselves of it when it was granted in 1858; but the collapse of the City of Glasgow Bank in Scotland, with the accompanying ruin of many shareholders, as told hereafter, led most of the joint stock banks to accept the Act of 1879, authorizing the

[1] The Irish and Scotch banks of issue hold gold funds, which amounted on May 30, 1908, to £9,997,073, but this gold is more or less tied up by the laws governing their circulation, and calls are almost invariably made for gold upon the Bank of England in times of stringency.

[2] Palgrave, 24–25.

creation of a reserve liability in the form of uncalled capital as the limit of obligation of shareholders in case of failure.[1] This definition of the obligations of the shareholder led wealthy men, who had formerly stood aloof, to invest in bank shares, and within the next thirty years joint stock banking resources were more than doubled. The number of banking offices open to the public in England and Wales increased from 1779 in 1872 to 6973 in 1913, while in the United Kingdom as a whole the increase was from 2924 in 1872 to 4460 in 1886, 5612 in 1894, 6512 in 1900, and 9116 in 1913. Even with the great increase in number of offices in England and Wales, the equipment reached only one office to 5173 of the population in 1913. This was below the figure for Scotland in 1872, which was one office to 4137 people, and which rose in 1913 to one office for 3790 people.[2]

While this great improvement in the accommodation of the public was taking place, the number of banks was diminishing. Forty-two banks in the United Kingdom were absorbed by others from 1877 to 1886, 90 from 1887 to 1895, and more than 100 from 1896 to 1907.[3] One of the causes of these amalgamations, especially where country banks were absorbed by London banks, was the low rates for money which prevailed in the city from 1892 to 1896. The country rate, being more steady, afforded a larger profit to the city bank, while the country bank benefited by the addition to prestige and capital resulting from absorption, which permitted a larger extension of business. Some of the smaller London banks, on the other hand, yielded to the pressure for concentration by union with large provincial banks, which thus obtained the benefits of London offices and admission to the clearing house.[4] Finally, began in

[1] Sykes, 98.

[2] London *Bankers' Magazine*, February, 1914, XCVII., 170.

[3] The number of banks stated as in operation differs somewhat according to the classes dealt with. Straker states the number of joint stock banks in 1849, in England and Wales, at 99; in 1892, 102; and in 1902, 68.—*The Money Market*, 80.

[4] Sykes, 102–103.

recent years the union of large joint stock banks and private bankers in London. Out of these various measures of consolidation have come some of the largest banking houses in the world. The London, City, and Midland, an example of the entrance of a provincial bank into London, had at the close of 1913 assets of £108,584,213 and overtopped every other institution except the Bank of England. The absorption of four important banks during the five years 1909–13 was accompanied by an increase of capital and surplus to £8,048,650. A close second was Lloyds Bank, with capital and surplus of £7,208,672 and total assets of £106,618,948; while the third largest institution was the London County and Westminster, with capital and surplus in 1913 of £7,500,000 and total assets of £104,248,238.[1]

With the readjustment of the banking situation caused by the elimination of small institutions, new amalgamations have been fewer in recent years, reaching only four in 1908; six in 1909; five in 1910; three in 1911; one in 1912; and three in 1913.

The total resources of the banks of the United Kingdom and Ireland at the close of the year 1913 were in excess of £1,350,000,000. The banks of England and Wales alone showed total assets of £1,116,487,779, of which £286,279,374 was in cash on hand, on call, or at short notice; £593,791,336 was in bills discounted, advances, and loans; and investments in securities were £164,197,691. On the side of liabilities, the deposits, current accounts, and note circulation represented £957,788,930 and capital and reserve funds £105,608,950. The total assets of the Scotch banks were £158,664,623, which included cash on hand and at short notice to the amount of £38,749,685; bills discounted, advances, and loans, £75,963,053; and investments, £34,024,335. On the side of liabilities, the deposits, current accounts, and note circulation

[1] In April, 1914, Lloyds absorbed the Wilts and Dorset Banking Company with resources of about £14,000,000, and in June, 1914, the London City and Midland arranged to take over the Metropolitan Bank of England and Wales, with assets of about £13,000,000.

were £135,060,895 and capital and reserve funds £17,496,450. The banks of Ireland showed total assets of £90,904,781, of which cash on hand and at short notice was £16,713,526; bills discounted, advances, and loans, £49,407,521; and investments, £23,934,664. On the side of liabilities, the deposits, current accounts, and circulation were £78,953,230 and capital and reserve funds £11,095,230. Total liabilities on account of deposits, current accounts, and circulation for all British banks, including small amounts for the Isle of Man, were £1,172,725,299; discounts, advances, and loans were £719,284,295; and investments, £224,486,077.

From this extreme concentration of banking resources has arisen much controversy whether the cash kept by the Bank of England is sufficient in amount to support such a mass of credit, and whether, if it is not sufficient, larger reserves in coin should not be kept by the joint stock and private banks. The experience of three crises since the Bank Act of 1844 has given serious warning of the shock which would come to every British interest if the Bank of England should prove inadequate to support the fabric of British credit and to supply all foreign demands for gold. Mr. Bagehot fixed "the apprehension minimum," below which the bank reserve could not go without exciting alarm, at £10,000,000, and he maintained that measures to protect the reserve should begin to be taken when it dropped below £15,000,000. The reserve was gradually strengthened by the accumulation of gold and by the financial blunders of other countries until it stood in 1891 at £22,295,403; but this expansion no more than kept pace with the expansion of credit and did not diminish apprehension for the future. Mr. Goschen, the distinguished financier who has several times acted as Chancellor of the Exchequer, proposed a plan in 1891 for issuing £1 notes upon a reserve consisting of four-fifths gold and one-fifth securities. The purpose of the plan was to substitute the notes for gold in the hands of the public, and to draw the gold into the bullion reserve of the bank. Mr. Goschen proposed, if the bullion in the bank was raised by

this means to £30,000,000, to "give certain additional powers of issue in times of emergency," by authorizing the bank to strengthen the reserve in the banking department by the issue of additional notes against securities, on paying to the government a high rate of interest, to be fixed by law. Mr. Goschen's proposals were much discussed, but did not result in definite action. Other proposals at various dates proved equally abortive.[1]

Agitation of the subject was renewed in 1906 and acquired new vigor from the pressure caused on the London money market by the American crisis of the next year. Attention then began to be called to the deposits in the post-office savings banks, which from £80,579,641 in 1893 increased to £155,996,446 in 1906. It was pointed out that these deposit accounts constituted a point of attack exposed to extreme danger in case alarm should be spread among the poor or ignorant by a financial crisis. Against these deposits, which were invested in securities, the government kept no reserve at all, and was compelled even under ordinary conditions to borrow from the Bank of England on deficiency bills when withdrawals exceeded deposits.[2] A plan suggested for strengthening reserves by Mr. Holden of the London, City, and Midland Bank was that the government should pay off its old debt to the bank, upon which the institution was founded, in actual gold, which should be added to the reserve, but that the government should continue to pay the bank the amount of the interest previously paid on the debt. It was argued that this payment could not be construed as a subsidy to the bank, but only as proper provision by the government for the protection of the postal savings bank deposits. While coöperation among the joint stock banks to create a special reserve was often urged, such a policy bristled with difficulties arising from the severity of com-

[1] Some of these are reviewed by Sykes, in the new edition of Gilbart, *The History, Principles, and Practice of Banking*, II., 430–440.

[2] London *Bankers' Magazine*, April, 1908, LXXXV., 527.

petition. So seriously was the situation regarded, however, that in the spring of 1908 the subject was taken under consideration by a committee of bankers and by a special committee of the London Chamber of Commerce.[1]

One of the significant features of the growing banking power of other countries was the impairment of the power of the Bank of England to influence the flow of gold by changing the discount rate. While London has continued to be the centre upon which bills of exchange have been negotiated from all over the world, Great Britain has ceased to enjoy her old monopoly of foreign trade, and much of the banking business is now done by agencies of foreign banks.[2] In emergencies the London market, as in 1889 and 1906, turns to the Bank of France for gold. Superimposed upon this menace from abroad to the power of the Bank of England is the immensely increased banking power and the increased demands of the British market. As the situation is described by a careful student[3]:

> From a banking position, there is no doubt economy in making the Bank of England keep the reserve of the bankers, but it is equally certain that, from a general point of view, the doing this tends to place the stress of every pressure which occurs always on one point—a point on which many and varied needs all concentrate —demands for domestic and foreign needs, the requirements for harvest wages and annual holiday-makers in England, of farmers in Scotland, of dealers in Ireland, the requirements of great nations forming and increasing their gold circulations, the demands for gold for export as well as for the internal circulation of the country.

In order to retain control of a market in which so many

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[1] London *Bankers' Magazine*, April, 1908, LXXXV., 512.

[2] It was declared in 1904 by Mr. W. R. Lawson, "that all the London banks, discount houses, and private bankers together should hold only forty millions sterling or thereabouts of our foreign bills, while they credit foreign banks with a holding of from fifty to one hundred millions sterling, is an anomaly to be investigated."—*British Economics in 1904*, 226.

[3] Palgrave, *Bank Rate and the Money Market*, 41.

disturbing factors play a part, the Bank of England has several times changed its discount policy and adopted other measures to influence the supply of floating capital. One of the most frequent of these devices is what is called "borrowing on consols." This consists in the sale by the bank in the open market of a portion of its holdings of consols for cash and the purchase at the same time of an equal amount of consols for the monthly account. The effect of this operation is to absorb the amount of cash for which the consols are sold and thus force up "the open market rate" for money, while the bank gets back the consols at the time of the monthly settlement.[1]

Prior to 1844 comparative uniformity prevailed in discount rates at the Bank of England. For more than a century, down to 1839, "the bank rate" never exceeded five per cent. nor fell below four per cent. During the pressure of 1839 it was raised for some months to six per cent., but in January, 1840, was reduced to five per cent. and remained at that rate or at four per cent. until the passage of the Act of 1844.[2] At that time, the open market rate being not above two per cent., the bank was "out of the market." It was in August, 1844, that the bank rate was reduced to two and a half per cent., and from that date the changes in rate have been more numerous than at any other bank in the world. The total number of changes from 1844 to the close of 1900 was 400, of which by far the greater number were made after the change of policy in 1857 already referred to. During the thirty-eight years from 1857 to the period of cheap money in 1894 occurred 330 changes, or an average of more than eight per year. The year 1873 witnessed twenty-four

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[1] *Cf.* Nicholas, in *Moody's Magazine*, January, 1907, III., 158. Easton says regarding this practice: "It is difficult to understand how such capital can be utilized at a profit, but when the bank gets control of the market it is able to obtain more discount business, which no doubt would more than compensate it for the amount paid as interest on loans."—*Banks and Banking*, 150.

[2] Palgrave, 49.

changes and fifteen other years ten or more changes each. The frequency of the changes in 1873 was due to the large operations in bills arising out of the payment of the French war indemnity to Germany.[1] The result of these repeated variations was to afford a low rate for money during most of the period covered. A rate not exceeding two and a half per cent. was charged during 6434 days, from 1844 to 1900, or more than one-quarter of the time; a rate not exceeding three per cent. was charged during 11,341 days, or more than half the time (including the lower rate); and a rate not exceeding four per cent. was charged during 15,778 days, or more than three-quarters of the time.[2]

Changes in the discount rate at London were numerous during the early years of the twentieth century, the average falling only once prior to 1908 as low as three per cent. The average rate in 1901 was 3.72; in 1902, 3.33; in 1903, 3.75; in 1904, 3.30; in 1905, 3.00; in 1906, 4.27; in 1907, 4.93; in 1908, 3.00; in 1909, 3.10; in 1910, 3.72; in 1911, 3.47; in 1912, 3.77; in 1913, 4.77 per cent.[3] The maximum rate of 1905 was four per cent., and this or three and a half per cent. prevailed until October, 1906; but then began the pressure on international money markets which forced an advance to six per cent. within the month and its continuance into January, 1907. Seven changes in the rate marked that troubled year; but the average was only a fraction below the average for 1913, when pressure due to political uncertainties was intensified by the persistent efforts of Germany, France, and Russia to add to their stocks of gold.

The higher rates, however, after 1878 were enforced only upon the outside public. Private bankers and brokers adjusted their rates so promptly to changes in market conditions, and made such discriminations between first-class bills and ordinary trade bills, that the Bank of England felt

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[1] Easton, *Banks and Banking*, 132.

[2] Palgrave, 102.

[3] *Bulletin de Statistique*, February, 1914, LXXIII., 233.

called upon to protect itself by similar measures.[1] The step taken in February, 1878, was to announce that the bank would, when occasion required, discount for customers who transacted business exclusively with the bank, at a rate lower than the advertised official rate.[2] At its provincial branches discounts are granted at the ordinary local rate. Another departure was the arrangement entered into in 1890 with the Hampshire County Council, by which the funds of the Council on deposit with the bank were to be loaned through its agency and the profits, less a commission, given to the Council.[3]

The Bank of England is governed by a court of twenty-four directors, and a governor and a deputy governor who serve for a term of one year. The senior director who has not already served is usually made governor and the next in seniority deputy governor. Eight of the directors retire every year, but these are usually the younger ones, so that the older always remain. It is customary to choose young men for vacancies in the board, so that they will be still in the possession of physical vigor when their turn comes to be governor.[4] Bankers in the strictly English sense, lenders of money for short terms on commercial paper, are not allowed to serve on the board of directors, but this rule does not exclude the leaders of finance who are engaged in other branches of the banking business. It is usually about twenty years from the time of a man's entry upon the board of directors until he is reached in his turn as governor,

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[1] Sykes declares that there are at least five rates in London; but one of these is the deposit rate, representing the allowance to depositors by the joint stock and private banks. This is usually fixed one and a half per cent. below the Bank of England rate.—*Banking and Currency*, 162–163.

[2] Palgrave, 55.

[3] It was stated at this time that the question of paying interest on deposits, which had not before been the practice, "might be raised for consideration."—Turner, *Chronicles of the Bank of England*, 254.

[4] Bagehot, *Works*, V., 136.

and it is rarely that a director is made governor out of his turn or serves more than two years. The board meets with the governor and the deputy every Thursday in what has become historic as "the bank parlor," to pass upon the report for the week.

The Bank of England has been comparatively free from government interference since the time of Pitt. It receives the public deposits and performs many financial operations for the government, but it differs from many Continental banks in the sense that "it is purely the banker of the state, and not its cashier, and as such maintains with it the same relations as with the individuals and companies which constitute its clientage."[1] One of the largest operations performed in this capacity was the conversion of the consolidated and other classes of three per cents. in 1888. These securities were reduced to two and three-quarters per cent., with the provision that after April 5, 1903, the rate of return should fall to two and a half per cent. Out of a total sum of £590,824,407 dealt with by the Conversion Act, the Bank of England, with some aid from the Bank of Ireland, had by November 5, 1888, converted £549,094,010.[2]

There is no division of the profits of the bank with the state, as among the leading Continental banks, and only moderate taxes are paid. The necessity of acting as guardian of the gold reserve of the country has kept the profits of the Bank of England, however, in recent years below those of the more successful joint stock banks. The highest dividends paid since 1866 were eleven per cent. in 1891 and ten and a half per cent. in 1879, 1882, and 1890. Ten per cent. was paid from 1897 to 1903, inclusive, but the rate in more recent years has been nine per cent.[3]

[1] Noel, I., 232.

[2] Gilbart, I., 93. The remainder was disposed of under various provisions of law.

[3] The figures for each year from 1695 down are given by Gilbart, I., 97.

The measure of the changes in the bullion in the bank in recent years, as well as the state of the other leading items of the bank's accounts, for the average of the last quarter in each year, is given in the following table:

YEAR.	NOTES IN CIRCULATION.	DEPOSITS.	SECURITIES.	BULLION.
1880	£26,829,000	£31,350,000	£34,839,000	£26,406,000
1881	26,237,000	28,633,000	37,096,000	20,876,000
1882	26,351,000	27,410,000	36,147,000	20,751,000
1883	25,683,000	29,205,000	35,669,000	22,355,000
1884	25,222,999	29,346,720	36,336,691	20,360,721
1885	24,621,423	29,344,372	34,643,349	20,826,856
1886	24,691,913	27,038,698	33,895,673	19,929,836
1887	24,209,867	26,930,149	32,508,224	20,238,539
1888	24,405,030	29,281,524	35,977,745	19,455,412
1889	24,460.836	29,837,081	36,301,144	19,712,368
1890	24,732,153	35,414,155	39,168,647	21,820,279
1891	25,510,059	34,830,397	38,607,719	23,159,668
1892	26,039,500	34,367,453	36,809,048	24,991,060
1893	25,778,436	34,204,021	35,543,067	25,865,721
1894	25,528,878	41,614,576	32,937,638	35,262,470
1895	26,090,666	56,354,680	40,996,456	42,473,334
1896	26,672,217	59,574,404	42,393,798	35,911,881
1897	27,422,525	45,601,685	42,242,939	31,834,320
1898	27,311,327	42,459,967	39,283,485	31,489,297
1899	28,479,023	48,247,856	46,145,806	31,704,656
1900	29,638,602	47,017,854	44,851,587	31,969,693
1901	29,630,620	50,492,232	44,714,890	35,568,509
1902	29,315,670	50,779,638	47,055,875	32,798,470
1903	28,631,341	48,067,855	44,553,523	31,539,094
1904	28,051,886	48,879,852	42,594,067	33,711,078
1905	29,002,873	53,545,820	50,033,036	31,918,667
1906	28,676,871	50,730,798	48,501,268	30,388,371
1907[1]	29,514,250	49,131,248	47,366,980	29,753,540
1908	29,751,000	61,527,000	59,817,000	29,411,000
1909	28,858,000	60,993,000	56,482,000	31,836,000
1910	28,611,000	55,963,000	52,534,000	30,549,000
1911	29,193,000	61,123,000	57,186,000	31,732,000
1912	29,272,000	51,495,000	53,816,000	29,294,000
1913	29,608,000	71,343,000	65,337,000	33,875,009

[1] Figures from 1907 represent the average of the last week of the year.

CHAPTER VI.

THE SCOTCH BANKING SYSTEM.

Its General Scope and Results—The Bank of Scotland and the Royal Bank—The Failures of the Ayr Bank, the Western Bank and the City of Glasgow Bank—Advantages of Scotch Banking and its Effect upon the Habits of the People and the Prosperity of the Country—Branch Banks in London and Limited Liability.

THE Scotch system of banks of issue comes nearer to the ideal of successful free banking than that of any other country. Absolute freedom in note issues reigned for over one hundred years in Scotland, and during eighty years of that period general distrust of the banking system never occurred, small notes became the favorite medium of exchange among the people, and the deposits in the banks absorbed almost the entire savings of rich and poor and brought within the circle of active producing capital the entire accumulations of the country. Such defects as were disclosed in the early years of Scotch banking were corrected with experience, and the few departures which have taken place from sound principles have been such as to suggest no change in the established practice of the majority of Scotch banks, but, at the most, some official regulation which should hold all to the rules voluntarily adopted by the oldest banks and the soundest bankers. The mania for restricting note issues which swept over the British Parliament in 1844 shut the circulation of the Scotch banks within fixed legal limits, and limited the banks of issue to those already in existence, but left untouched their power to issue small notes and their means of accommodating the people of Scotland by receiving deposits.

Banking in Scotland was inaugurated by the system of monopoly, but differed from all earlier banking systems enjoying monopoly of note issues in the fact that the first joint stock bank was formed by private persons for the express purpose of promoting trade and not for supporting the credit of the government. The charter of the Bank of Scotland, which was organized under authority of an act of the Scotch Parliament of July 17, 1695, was framed to some extent on the model of the charter of the Bank of England and made it illegal for any other company to set up the business of banking for twenty-one years. The joint stock was to be 1,200,000 Scotch pounds, the equivalent of 100,000 English pounds sterling, and was to be subscribed in amounts of not less than £1000 Scotch nor more than £20,000 Scotch (equivalent to £83 6*s.* 8*d.* and £1666 13*s.* 4*d.* English).[1] The bank was allowed to lend on real or personal security at not more than six per cent., but was prohibited from employing its stock or profits in any other trade or commerce, except that of lending and borrowing money upon interest and the negotiation of bills of exchange. The company was prohibited from purchasing land or from advancing money to the government, upon the anticipation of any sums to be granted by Parliament, except those upon which a loan should be authorized by a specific act.

The Bank of Scotland soon encountered the opposition of the African Company, otherwise known as the Darien Company, which was organized by William Paterson, the founder of the Bank of England. The Bank of Scotland had so little confidence in its ability to protect its monopoly, that it made no serious effort to contest the legal rights of its rival, but endeavored to strengthen its position by calling in two-tenths of its capital, of which one-tenth had been originally paid in. The African company issued notes with great imprudence, lent to its own shareholders, and was obliged to

[1] The coinage of Scotland was assimilated with that of England by the act of Union in 1707, and the Bank of Scotland assisted in the operation by receiving the old money and giving new money or their own notes in return.

abandon the field in May, 1698. The Bank of Scotland repaid to their shareholders the two-tenths of the capital called in and continued for several years without a rival. No deposits were received at first from the public, but notes were issued against the capital of the denominations of £5, £10, £20, £50, and £100. Notes for £1 were first issued between 1699 and 1704. A run was begun in December of the latter year, which compelled the bank to suspend specie payments. A meeting of the proprietors was held and a device adopted which is still of interest because it is similar to the existing laws of Canada and Germany in the case of failed banks. This device consisted in making the notes bear interest until they were paid and resulted in keeping the notes at par. Payment was made with interest in less than five months, by means of a new call upon the proprietors for one-tenth of the nominal capital. Another run upon the bank was made in September, 1715, when the rebellion on behalf of the Stuarts broke out, and the withdrawal of coin by the presentation of the notes was encouraged by the bank directors in order to prevent the seizure of the coin reserve by the insurgents. The bank suspended payment after most of the cash had been withdrawn and gave notice again that the notes would bear interest until paid. The monopoly of banking for twenty-one years expired in 1716 and no steps were taken to renew it.

The second successful bank in Scotland was formed, as in the case of the Bank of Venice and Bank of England, by the proprietors of the public debt, which they assumed on the union with England. An act which was passed in 1719 empowered the King to incorporate the proprietors of the debt into a body corporate, which was organized in 1724. The new corporation endeavored to secure admission to the Bank of Scotland, upon the terms of increasing the capital of the united bank by the sum of £250,000,—the principal of the debt,—and the division of the annual interest of £10,000 in the proportion of two-sevenths to the shareholders of the bank and five-sevenths to the holders of the debt. The bank was making dividends which were declared by rivals to

run as high as fifty per cent., and they replied that they had no legal authority to increase their capital, that their stock was large enough for the banking business of the country, and that they would not in any case unite with the holders of the debt at par while their stock was worth at least ten per cent. and the debt only paid four per cent. The holders of the debt, or the Equivalent Fund, as it was called, then petitioned the King for banking powers, which were granted on May 31, 1727. These powers were not granted without powerful opposition from the old bank, whose defenders declared that their capital, which they had called in to the amount of three-tenths, making an aggregate of £30,000, was sufficient to circulate all the credit that could be required in Scotland. The last call made for the payment of capital was partly paid in the notes of the bank. This raised a great outcry from unthinking persons, who maintained that the payments should be made in specie, but they were answered by the scientific statement that "bank-notes are justly reckoned the same as specie when paid in on a call of stock, because, when paid in, it lessens the demand on the bank."[1]

The new bank was known as the Royal Bank of Scotland and began business on December 8, 1727, with a capital stock of £151,000. They received support from the government by the deposit of £20,000 of public monies and their business rapidly extended. The Royal Bank is entitled to the credit of the invention of cash credits, the unique feature of Scotch banking which has done so much to promote the prosperity of Scotland and to place business success and wealth within the reach of the humblest of her people. There was a deal of friction between the two banks during these early years and the Bank of Scotland introduced a clause into their notes making them payable at the discretion of the directors at the end of six months, with the interest from the time of presentation until the time of payment, instead of payable in coin on demand. This practical suspension of redemption on demand resulted in excessive

[1] MacLeod, *Theory and Practice of Banking*, II., 203.

issues of notes, not only by the two leading banks, but by private banking and manufacturing companies, and the fall of the notes below par. The attempt to maintain coin redemption was carried out by a process, which is described in detail by Adam Smith,[1] of collecting coin through London agents and sending it down in wagons to Scotland. Bills of exchange were constantly drawn upon London to cover coin obligations and their payment was often provided for only by drawing fresh bills. The fact that the bank paper was below par led to the constant presentation of notes for redemption and justified Smith's declaration that "bringing gold into the country was like pouring water into a sieve, or like the toil of Danaides." The two principal banks soon saw the folly of this method of doing business and agreed to combine their influence to obtain an act of Parliament, which was passed in 1765, prohibiting the issue of notes with the optional clause, making all such notes payable to bearer on demand, and prohibiting notes under twenty shillings ($5).

The Bank of Scotland and the Royal Bank were the only chartered banks until the incorporation of the British Linen Company at Edinburgh in 1746. This company was organized for the purpose of promoting the linen industry by lending money to the manufacturers and as the Company was thus led into the banking business it soon found it expedient to continue as a banking company only, under the original name.[2] The next important institution founded was the Ayr Bank, which distinguished itself by a radical departure from the methods of the older Scotch banks. The wonderful expansion of Scotch agriculture and industry after the failure of the Jacobite rebellion, under the stimulus of conservative free banking and the system of cash credits, was not rapid enough for certain restless spirits who wished to borrow far beyond their capital or credit. The Ayr Bank was formed with the avowed purpose of adopting a more liberal policy, and the course of the older banks in gradually

[1] *Wealth of Nations*, Book II., Ch. ii., 1, 302.

[2] Cunningham, II., 350.

curtailing the discounts of a group of speculators who were dealing in accommodation paper drove all this class of business to the new bank. The result was the over-issue of notes, which came back so rapidly upon the bank for redemption in coin that it was necessary to draw constantly upon London and to incur heavy expenses for commissions and interest. As Adam Smith describes the operations of the bank :

> When it was obliged to stop, it had in the circulation about £200,000 in bank-notes. In order to support the circulation of those notes, which were continually returning upon it as fast as they were issued it had been constantly in the practice of drawing bills of exchange upon London, of which the number and value were continually increasing, and, when it stopped, amounted to upwards of £600,000. This bank, therefore, had in little more than the course of two years advanced to different people upwards of £800,000 at five per cent. Upon the £200,000, which it circulated in bank-notes, this five per cent. might perhaps be considered as clear gain, without any other deduction besides the expense of management. But upon upwards of £600,000 for which it was continually drawing bills of exchange upon London, it was paying, in the way of interest and commission, upwards of eight per cent., and was, consequently, losing more than three per cent. upon more than three-fourths of all its dealings.

The Ayr Bank was founded by a company which comprised the Duke of Hamilton and many other wealthy landed proprietors and it was supposed that their estates, which were pledged by the unlimited liability of the stockholders, would suffice to maintain the notes of the bank at par and supply it with coin. The failure of the experiment proved two of the essential principles of a banking currency—that no greater volume of notes can be maintained in circulation than the convenience of business requires, and that landed security is not the equivalent of coin in maintaining the redemption of notes on demand or the credit of a bank. The period of the operation of the Ayr Bank was one of extensive speculation and large Scotch exports, but the apparent prosperity was brought to a sudden halt by the crisis of 1772, which began in London on June 10th, and caused a run upon

the Edinburgh branch of the Ayr Bank just one week later. The bank continued its payments until June 25th, when it was compelled to suspend and its great mass of obligations was discredited.

The Bank of Scotland was authorized in 1774 to double its capital stock, and began in this year the policy of establising branches which has become so striking a feature of Scotch banking. Efforts had been made in 1696 and again in 1731 to establish branches in Glasgow, Aberdeen, Dundee, and one or two other places, but in both instances proved unprofitable and were abandoned after a year or two. The capital of the Bank of Scotland was increased in 1784 to £300,000, in 1792 to £600,000, in 1794 to £1,000,000, and in 1804 to £1,500,000, of which £1,000,000, was paid in. The present paid up capital is £1,250,000 and the nominal capital £1,875,000. The capital of the Royal Bank has been raised to £2,000,000, all of which has been paid in. The capital of the British Linen Company is £1,000,000, all paid in. The Commercial Bank was founded in 1810 as the banking institution of the Liberal party, with a paid-up capital of £1,000,000, which was strengthened later by a reserve fund of £400,000. The nominal capital is now £5,000,000. These four banks—the Bank of Scotland, the Royal Bank, the British Linen Company, and the Commercial Bank—are the oldest institutions now in existence. The other banks of issue which were in operation when the Act of 1845 forbade the extension of the system were for the most part founded as late as 1825, the date of the foundation of the existing National Bank of Scotland and the Abderdeen Town and County Bank. There were a few older institutions which have since ceased to exist, among them being the Perth Banking Company, founded in 1766 and united with the Union Bank in 1857, and the Dundee Banking Company, founded in 1763 and united with the Royal Bank of Scotland in 1864.

The strength of the Scotch banking system was illustrated by the events which followed the suspension of specie payments in England. The news reached Edinburgh on March

1, 1797, and a meeting of the bank officers decided that it would be necessary for the Scotch banks to follow the example of the Bank of England. There were symptoms of a run for a few days, and the disappearance of specie led to the cutting of £1 notes into quarters to afford a currency for small transactions.[1] The Lord Provost called a meeting of the principal inhabitants, who resolved to support the credit of the banks and to receive their notes as specie. Banks which had been in the habit of issuing notes were allowed to issue notes for five shillings for a limited period and confidence quickly returned. No action was ever brought against the banks for their failure to pay specie, the notes were received as confidently as ever, and in a short time business activity was resumed and continued throughout the long Napoleonic wars. The banks, in the language of the report to the Lords in 1826, "supported themselves from 1797 to 1812 without any protection from the restriction by which the Bank of England, and that of Ireland, were relieved from cash payments."

The policy of the English Bank Act of 1844, to suppress the evils of speculation by restricting bank-note circulation, was extended to Scotland in 1845,[2] but several of the provisions regarding the Scotch banks differ from those affecting the English banks. The banks of issue existing in Scotland at the time of the passing of the act were allowed to retain an authorized circulation equal to the average during the year ending on the 1st of May, 1845. They were also authorized to issue additional notes when fully covered by deposits of coin at the head office or principal place of issue. Not more than one-fifth of this coin deposit was to be in silver. The Scotch banks, therefore, stood upon an equality in issuing notes upon deposits of coin beyond the authorized limit, while the English banks except the Bank of England were absolutely limited. No new bank of issue could be founded, however, in Scotland. The authorized circulation of the Scotch banks, as ascertained under the new law,

[1] MacLeod, *Theory of Credit*, II., 601.

[2] 8 and 9 Victoria, c. 38.

was £3,087,209. The limit of authorized circulation was reduced by the suspension of the Western Bank in 1857, which had an authorized limit of £337,938, and the similar suspension of the City of Glasgow Bank in 1878, which had an authorized limit of £72,921. These reductions fixed the authorized circulation at £2,676,350, where it now stands. The union of two Scotch banks is permitted by the Act of 1845, and the retention of the aggregate circulation of both. Several unions of this kind have taken place without changing the limit of the authorized circulation for the Kingdom. The average circulation of the Scotch banks for the four weeks ending July 25, 1908, including that covered by coin, is shown in the following table :

Circulation of the Scotch Banks.

BANK.	AUTHORIZED CIRCULATION.	AVERAGE CIRCULATION FOR FOUR WEEKS	AVERAGE GOLD AND SILVER HELD FOR FOUR WEEKS.
Bank of Scotland.....	£343,418	£1,196,830	£936,464
Royal Bank of Scotland...	216,451	1,037,057	966,203
British Linen Company ...	438,024	844,659	594,767
Com'l Bank of Scotland...	374,880	957,335	746,743
Nat. Bank of Scotland....	297,024	802,561	642,923
Union Bank of Scotland...	454,346	918,225	671,461
N. of Scotland Banking Co.	224,452	727,124	577,439
Clydesdale Banking Co....	274,321	747,195	609,410
Total.....	2,676,350	7,230,986	5,745,410

The average circulation of these banks for February, 1914, was £7,190,931, of which £5,009,068 was in notes for less than £5.

The history of Scotch banking was comparatively uneventful after the restrictive legislation of 1845, except for the two great failures of the Western Bank in 1857 and the City of Glasgow Bank in 1878. As these failures have sometimes been treated by the opponents of Scotch banking as an impeachment of its safety and success, they are worthy of some attention in detail. Both occurred in years when

other banking institutions and business houses in England and other parts of the world were collapsing, but both were the result of methods of banking so reckless and unsound that they had repeatedly received, before the failures, the condemnation of other Scotch bankers. The Western Bank was founded in 1832 and in the twenty-four years of its operation lost its entire capital of £1,500,000, and nearly as much more from its other assets. The Western Bank from the outset kept in London a reserve which was much inferior to that of other Scotch banks and was so small that its drafts were dishonored in 1834 by its London agents. The other Scotch banks thereupon refused its notes and remonstrated with it for its mismanagement. The directors notified the other banks on October 30, 1834, that they had resolved to invest in marketable securities a sum sufficient to secure themselves in the future, to lessen their discounts, and to keep sufficient funds to meet their obligations. The chartered banks, upon this pledge, advanced £100,000 to the Western Bank to enable them to purchase the proposed securities. But the management of the Western Bank soon forgot their promises and returned to their former method of business. These methods were so objectionable that when they applied to the Board of Trade in 1838 for a grant of letters patent, the other banks presented a joint memorial against the grant. This memorial declared that Scotland, during the periodical convulsions among the banks of England, which had led to the failure of several hundreds, had for the most part maintained a state of general tranquillity. The memorial continued :

> The cause of this is notoriously owing, first, to the large capital employed in the Scotch banks, and, second, to the system of administration adopted. Capital alone, as has been recently experienced in England, by extending the scale of operations, may only increase the mischief. In the like manner a numerous proprietary, constituting a protection to the public against eventual loss, may, by adding to the credit, add to the power of such an institution for evil. The safeguard of the Scotch system has been the uniform practice adopted of retaining a large portion of the capital and deposits invested in government securities, capable of being converted into money, at all

times and under all circumstances. This requires a sacrifice, because the rate of interest is small, and, in times of difficulty, the sale involves a loss, but it has given the Scotch banks absolute security, and enabled them to pass unhurt through periods of great discredit. . . .

The Western Bank was established in the year 1832, and the principle on which it has avowedly acted has been to employ as much as possible of its capital and assets in discounts and loans, retaining only the cash necessary to meet its current engagements. . . .

It will be quite apparent that a bank that can employ its whole funds in this manner is enabled either to divide a larger share of profits than its competitors, or to do business on more favorable terms; and we repeat, that if the only consequence of this was to increase or diminish the dividends of the rival establishments, it would be of comparatively small importance, but in its results it endangers the existence of every bank in the country and the fortunes of a large portion of the community. We feel that, if letters patent shall be granted to this bank, after what has passed, it will be a public sanction and countenance of a new and mischievous principle, opposed to the banking system of Scotland.

The charter was not granted and as the result of keeping such small reserves in London the Western Bank was again in trouble in 1847. The bank was then compelled to borrow £300,000 of the Bank of England in November and December, which it repaid in March, 1848. A somewhat more cautious policy was pursued until 1852, when the discounts of the bank were £13,525,332 and the re-discounts were £407,143. The bank even at this time had £356,000 in overdue bills and held a number of life insurance policies as security for dead loans, on which it was paying the premiums. A reckless policy of re-discounting was begun in 1852 which expanded the re-discounts in 1856 to £5,407,-363 with ordinary discounts of £20,410,884. The most alarming feature of the bank's affairs, however, was loans to four firms which reached an aggregate of £1,603,725. The character of the bills discounted for these firms is shown by the fact that of £402,716 in bills of Macdonald £398,349 were dishonored at maturity, and the results for the other three firms were only a little better. The books of the bank were examined, soon after the general meeting in June, 1857, by request of the directors and it was found that bad

debts to the amount of £573,000 were carried as good assets and that the advances to shareholders amounted to £988,487. It was found that the four firms to which such immense advances had been made had been dealing in accommodation paper and that the Macdonalds drew upon 124 acceptors, of whom only 37 had been inquired about and 21 were reported as extremely bad. The banks stopped the accounts of these firms, which immediately failed, and a panic resulted on the Stock Exchange on October 10th. Depositors began to withdraw their accounts, the bank was unable to settle its balances through the clearing house and on Monday, November 9th, closed its doors.

The collapse of the City of Glasgow Bank in 1878 was similar in its character to that of the Western Bank twenty-one years earlier and was due to similar causes. The City of Glasgow Bank was compelled to stop temporarily in 1857 and continued to be suspected of reckless management from that time until its failure. The institution had fallen into such discredit early in 1878 that the bill brokers generally asked and received an extra quarter or half of one per cent. over the market rate charged other banks in discounting its acceptances.[1] Distrust finally came to a head in September, 1878, when the London banks found increasing difficulty in getting rid of acceptances sent them by their correspondents in India and ordered their agents in the East to buy no more such paper. The directors of the City of Glasgow Bank appealed to the other Scotch banks for help towards the close of the month and an expert accountant was set to work upon their books. A slight examination showed that nearly £6,000,000 had been lent to four firms and that the books had been deliberately falsified for not less than three years. The other banks declined to give any assistance and the City of Glasgow Bank stopped payments on Wednesday, October 2d. The news was received very quietly in Scotland and the other Scotch banks announced that the notes of the failed bank would continue to be accepted as usual. They also made an arrangement by which relief was given

[1] Gilbart, II., 365.

to depositors who were hampered by the locking up of their money pending the settlement of the bank's affairs.

The heaviest burden of loss fell upon the shareholders, whose liability was unlimited under the law then in force. The liquidators were compelled to institute a number of suits to fasten the liability fully upon the shareholders and to defeat attempts to transfer stock. Having adjusted the list, they made a call for £500 for every £100 of stock held, and subsequently made another call for £2250 per share of £100. The result of the first call, of which the nominal amount was £4,200,000, resulted in receipts of £2,409,066 at the end of the second year of the liquidation, October 22, 1880. The nominal amount of the second call was £7,814,000, upon shareholders who were still solvent, and the amount realized was £3,405,452. The result of these two calls, with a sum of £5,851,657 realized from the assets, enabled the payment of seventeen shillings in the pound within less than two years and payment in full was made within little more than a year, with the help of an advance from the other Scotch banks, to creditors willing to forego interest on their claims. While the creditors thus lost almost nothing, the great majority of the shareholders were absolutely ruined. The majority expressed their purpose at the first meeting on October 22, 1878, to keep faith with their creditors, and they kept the pledge so well that when the two calls had been made the holders of only £88,722 out of the capital of £1,000,000 remained solvent. Criminal proceedings for the falsification of the books were begun against the directors and they were given short terms of imprisonment.

The narrative of the transformation of the unlimited banks of Great Britain into limited companies relates to English banking so far as it affects some of the great English joint stock banks, but it belongs more properly to the history of Scotch banking in its origin and in its relations with important banks of issue. The agitation of the subject was the direct result of the terrible losses suffered by the stockholders of the City of Glasgow Bank because of their unlimited liability for the obligations of the bank. The law of

England, which prevailed in Scotland after the union, presumed and enforced unlimited liability upon corporations except in the cases where special charters had been granted. There was much opposition to extending the principle of limited liability to private partnerships, but a statute of 1855 (Chapter 133) finally authorized the formation of joint stock companies under such conditions. Joint stock banks were excluded from the operation of this law and the exclusion was continued in the joint stock banking act of 1857. The failures of that year led to an enactment of 1858,[1] which admitted banks to the privileges of limited liability so far as concerned their general obligations. Banks issuing promissory notes, however, were liable for the amount of the notes, without limitation, in addition to the sum for which they might be liable to general creditors. This act was merely permissive and required banking companies which took advantage of it to give thirty days' notice to each customer and after registering under the act to post conspicuously at their offices, on February 1st and August 1st of each year, a statement of their liabilities and assets.

The Act of 1858 would have averted the hardships of the stockholders in the City of Glasgow Bank if they had taken advantage of its provisions before the failure. The three older Scotch banks, however, held special charters which limited their liability and the others, aside from the natural indisposition to revise their constitutions, feared that the effect would be injurious to their credit. Thus matters remained until the collapse of the City of Glasgow Bank. Investments in bank shares were recognized by the law courts in Scotland as a legitimate investment of trust funds, but the trustees were personally liable for the calls made by the banks as well as to their clients, and many were ruined by the failure. A steady selling of shares began all over England and Scotland, by the prudent as well as those who were carried away by the flurry of the moment.[2] The shares of the three senior Scotch banks declined about £55 on an

[1] Statute 1858, c. 91.

[2] Gilbart, II., 398.

average, while the shares of the unlimited banks fell about £90.

The subject of permitting banking with limited liability under different conditions from those imposed by the Act of 1858 was brought up in Parliament and the government on April 21, 1879, introduced a bill for the purpose. The act became law [1] after a good deal of controversy and authorized the increase of capital stock by an amount equal to existing shares or some multiple of their value, and liable to be called up only in case the company was wound up. This constituted a reserve liability, which placed a definite fund within the reach of a failed bank without requiring assessments upon the shareholders to the full amount of the liabilities. The principal of unlimited liability was retained in regard to note issues by corporations whose original charters were unlimited. Most of the leading English banks and the unlimited Scotch banks soon registered under the new law. It was feared that the adoption of limited liability would result in a reduction of deposits, but this fear was discovered to be unfounded and deposits materially increased in the limited banks within the next few years. The banks generally adopted the policy of increasing their reserve funds by setting aside a part of the profits, but the reserve funds themselves are a source of profit in the revenue derived from the securities in which they are invested. It was found, moreover, by some of the English joint stock banks that a better class of shareholders, of undoubted responsibility, were attracted by the limited principle where men of straw without other visible assets had begun to acquire title to the stock when the liability was unlimited.[2]

The three senior Scotch banks possessed the privilege of limited liability in respect to both note issues and general liabilities. They desired in 1881 to increase their capital and to issue additional stock under the conditions of the limited companies.[3] The bills which they proposed were at first

[1] 42 and 43 Victoria, c., 76.

[2] London *Bankers' Magazine*, June, 1892, LIII., 897.

[3] The chartered banks had occasion to point out, in the course of

favorably received in Parliament, but after passing a second reading in the House of Lords were opposed by the government. Conferences and correspondence ensued which brought out some rather startling statements as to the policy of the government towards the Scotch note issues. Several of the objections made to the proposed bills were completely demolished by the representatives of the banks, and the government several times shifted their position. The government at first objected to legislation by private bill and suggested that the grant of new privileges in recent years to corporations had been accompanied by a review of those already possessed. They declared they were determined to oppose the grant of new powers if the three banks continued to ask for them accompanied by limited liability for notes. The banks promptly offered to cover their note issue by government securities to the amount of the circulation authorized by the Act of 1845 and by coin to the amount of the excess. The government then suddenly forgot their solicitude for the security of the circulation and intimated that they would give the banks a lease of the right of note issue for a fixed term, subject to a moderate royalty.

This was an important indication of public policy, for it grew out of the theory that the right of note issue was peculiarly an attribute of the state. It was based upon a measure dealing with English banks of issue which had been brought before Parliament by Lord Palmerston in 1865, but never became law. The government emphasized their leaning towards state note issues by an alternative proposition which they submitted,—that the banks join them in considering the terms upon which a state issue of notes, conducted through the agency of all the banks, and maintaining the £1 circulation, might be introduced into Scotland in place of the existing circulation. The banks replied

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the discussion which followed, that there were legal difficulties which were almost insuperable against extending unlimited liability for existing note issues to their shareholders, but they expressed their willingness to adopt other safeguards for the ultimate redemption of the notes.—Gilbart, II., 414.

at length, declining these propositions. They did not care to take a lease of rights which they declared were already theirs and had been exercised under express grants from the Crown or from Parliament for from 135 years, in the case of the youngest, to 186 years in the case of the oldest of the three banks. A state issue of notes, they declared, would not be acceptable to the people of Scotland, who would suffer more than the banks from the closing of many of the branches and the diminution of banking facilities which would be the necessary consequence.

The right of the Scotch banks to maintain their branches in England became a subject of active controversy in 1875, when Mr. Goschen introduced a bill in the House of Commons prohibiting such branches. The National Bank of Scotland had established a London branch in 1865 and the Bank of Scotland in 1872, and Mr. Goschen himself had carried through a bill permitting the Royal Bank to do so in 1873. It was the opening by the Clydesdale Bank of branches in Northern England which aroused the hostility of the English banks.[1] Mr. Goschen's bill resulted in a commission, which made no recommendations, and the matter was dropped. A new attempt was made to drag the limitation upon Scotch banking into the limited liability act of 1879. It was embodied in the eighth section of the original government bill and prohibited limited companies from establishing branches outside that part of the Kingdom in which they had their head offices. The Scotch banks were immediately up in arms against this provision and the government were finally persuaded to abandon it. They attempted a flank movement, by cutting down the operations of the bill to the joint stock banks of England, entirely excluding Scotland and Ireland. This was to defeat one of the most important purposes of the bill and the friends of the Scotch banks declared that they would not permit it to pass in such a form. The government were finally compelled to give way and permit its passage in a form applicable to the entire United King-

[1] MacLeod, *Theory and Practice of Banking*, II, 397.

dom and without any limitations upon the power of the Scotch banks to establish their branches in London.

The essential features of the Scotch system of banking have been freedom of note issues, the use of small notes, and cash credits. The great achievements of the system with these elements may be summed up thus:

1. It has provided Scotland with an elastic currency, adapted to the condition of her industries and adequate in volume to their changing needs.

2. It has enabled the people to carry on numerous commercial and agricultural transactions for which they could not have found the necessary quantity of coin and has economized the locking up of capital in the precious metals.

3. It has made the use of notes of small denominations familiar and popular and has taught the people the distinction between bank-notes as the representatives of credit and the precious metals as the measures of value.

4. It has brought into active use the available savings and capital of the country.

5. It has afforded an opportunity for entering upon business to thousands of poor but honest men and enabled them to lay the foundation of a comfortable home and in many cases of a fortune.

6. It has convinced the people so conclusively of the value and safety of the banking currency system that no serious panic has ever lasted beyond a few days or has ever affected any of the banks except those which were justly the subject of distrust.

I. The first proposition, that the Scotch banking system has provided the country with an elastic and adequate currency, is strictly applicable only to the period between 1765, when payment of notes on demand was made obligatory by law, and 1845, when the volume of authorized circulation was arbitrarily limited. The limitation imposed in 1845 could not be seriously objected to at that time, because it left the authorized circulation at the amount then existing. The moderate demands of changing seasons for an increased volume of circulation could easily be met by issues of notes

against coin, since it would be highly improbable and imprudent that any bank should be without a small supply of coin which might be made available for such a purpose. This view of the matter is based, however, upon the theory that the population and trade of Scotland were to remain stationary or to decline, as actually happened to the population of Ireland. An advancing population and volume of trade must gradually feel the fetters cramping the flesh of commerce and this has been to some extent the experience of Scotland. "The only effect of this law," upon the banks, according to M. Courcelle-Seneuil, "has been to limit their productive power, in condemning them to keep in reserve a considerable sum without necessity." [1] Protests against the operation of the Act of 1845 have been frequently made by the Scotch chambers of commerce and experience has seemed to justify the early criticism of Mr. Gilbart, "that restrictions upon banks are taxes upon the public." [2] But Scotland had already passed the point in 1845 where free banking was of supreme importance to her industrial development. Limitations upon her circulation might hamper the operations and reduce the profits of the banks, but they could not unlearn the lessons in saving and in the use of banking facilities which had been taught by a century of free banking.

The Scotch circulation has continued to fluctuate in some degree according to the seasons, the lowest point being reached in March and the highest in November. The advance, however, is not steady from March to November, but rises to a high point in May and then falls slightly until the advance sets in which culminates in the autumn. May and November are the months when the interest on mortgages is usually settled, annuities are paid, the country people take the interest on their deposits, and servants receive their wages. It was the custom during the first half of the present century to settle all such transactions by bank-notes. This made it easier for the banks to keep their accounts than under the system of drawing odd amounts in checks; for a

[1] *Traité des Opérations de Banque*, 298.

[2] *History, Principles, and Practice of Banking*, II., 182.

depositor having payments to make would draw out the entire sum in notes, would receive his payments during the day in the same form, and would deposit the net proceeds again in one sum in notes at the close of the day. The use of checks has now become more general, but does not prevent the rise and fall of the circulation in the autumn and spring as formerly.[1]

The elasticity and security of the Scotch circulation are assured by the daily exchange of notes through the Edinburgh clearing house. The settlements for notes were undertaken at an early date by the Bank of Scotland and the Royal Bank, on each alternate month and are made by exchange drafts on London. A bank which cannot meet the test of these settlements is driven to suspension, as happened to the Western Bank in 1857. The daily exchanges by notes are the great regulator of the paper currency and by their means, according to the admission of one of the most radical opponents of free banking, "the average circulation of Scotch bank-notes is reduced to a term of a few days."[2] Notes which are not demanded by the convenience of trade quickly come back to the banks as deposits on current account and are returned through the exchanges to the issuing bank to be retired and cancelled.

II. The proposition that the banking currency of Scotland has enabled her people to carry on numerous transactions for which they could not well have found the necessary quantity of coin, was abundantly demonstrated by the testimony before the committees of Parliament which made reports upon the subject in 1826. The Act of 1845 was not successful, according to Mr. Gilbart, "in imparting to the people of Scotland a taste for gold." The circulation of notes, with the profit which the banks derived from circulation, was necessary to maintain the existing banking system and afford accommodation to the Scotch people. The banks have never issued the gold except upon demand or for special purposes. When it has become necessary to increase

[1] Gilbart, II., 178.

[2] Wolowski, *La Banque d'Angleterre*, etc., 515.

the circulation beyond the limit imposed by the gold in hand, they have quietly brought the gold from London to Edinburgh and kept it locked up in the vaults of the bank until the necessity for it was at an end. The amount of gold kept in the Scotch banks prior to the legislation of 1845 was but a small percentage of their obligations, but was large enough to maintain their solvency and supply the yellow metal when demanded for export or other special uses. The specie holdings for the four weeks ending January 3, 1846, just after the act took effect, were only £1,180,406, or less than half a pound sterling per capita, against a circulation of £3,336,409. The specie had increased for the four weeks ending March 5, 1864, to £2,337,459 against a circulation of £3,996,743; and for the four weeks ending October 5, 1895, to £5,521,437 against a circulation of £7,054,197, at which amount it has substantially remained.

III. The use of small notes has also been of enormous advantage to the people of Scotland, and has produced none of the dangerous results to the stability of the currency which have sometimes been predicted in other countries when small notes have been proposed. The benefits of issuing notes for £1 were fully set forth in the testimony before the committees of the two houses of Parliament in 1826. Mr. Robert Paul, the Secretary to the Commercial Bank, summed up some of the evils of abolishing small notes by declaring that it would require the reduction of the number of branches, because of the increased expense in the transmission of gold; the withdrawal of cash accounts, because they would no longer accomplish the end for which they were granted,—the maintenance of the small note circulation and the profits derived from it by the banks; and the reduction of the rate of interest paid on deposits, because it would be necessary to keep a very large stock of gold and to keep it wholly unproductive.

A letter written by an agent of the Renfrewshire Bank at Greenock to the manager, Mr. Roger Aytoun, set forth in an even more striking manner the absolute paralysis which would fall upon many transactions by the adoption of a gold

currency and the abolition of notes under £5. Cattle dealers in the country markets, he pointed out, often purchased two or three hundred beasts, reaching an aggregate value of several hundred pounds, but they purchased them by the single animal, at a price ranging from £2 to £4, from the farmers who brought them to market. It would be necessary, if £1 notes were abolished, for them to come to market loaded with gold and silver, and the difficulty of obtaining it from the banks would be increased by the fact that the banks derived no profit from its circulation. Grain was bought up, it was pointed out, in much the same manner and the herring fisheries, which often amounted at Lochfine alone to the value of £40,000 in a single season, were brought in by a thousand boats, whose catch for a night was generally under £5. "If small notes are superseded, and gold substituted," continued the letter, "it is not easy to see how the supply of gold is to be kept up to carry on the business and transactions of this country. Should a quantity of it be received into the circulation, it would not remain long, but find its way into the banks, who will not again give it out in bills as they do their notes, and it will immediately become a scarce article in the country. A person, then, having to pay in small sums, will on every such occasion be obliged to send his large notes to the bank that issued them, perhaps a hundred miles off, to receive gold and silver in their place, to answer his purpose." The evidence was so overwhelming of the value of the small note system that even Sir Robert Peel and the extreme advocates of the currency principle were convinced of the serious injury which its abolition would do in Scotland and both the committees of the Lords and the Commons recommended the postponement of the measure.

IV. The fourth advantage of the Scotch currency system, that it has brought into active use the available savings and capital of the country, is due to the system of allowing interest on deposits. This is hardly practicable except under freedom of note issues, because no other system would afford the banks sufficient profit to pay a rate of interest attractive

to capital. The early regulations permitted deposits for any amount above £10, subject to withdrawal at the will of the depositor and bearing interest from the day of deposit until the day of withdrawal. This system was supplemented by the provident banks, which received deposits of small sums until they amounted to £10. It was the ambition of the Scotch domestic, fisherman, and agricultural laborer to accumulate enough for a bank deposit during a half year or a year and add it to the principal and interest which he had already earned. When this sum accumulated sufficiently to enable the depositor to buy or build a house, or to set up as a master in the trade in which he had been a servant, it would be drawn in bank-notes, which would continue to afford profit to the bank until returned by some other depositor. The system thus stimulated greatly the frugality and savings of the poor, and did much to accumulate in Scotland a capital capable of developing her agriculture and manufactures.[1]

It has not been merely as savings banks, however, that the Scotch banks have contributed to bring into the circle of active industry the entire capital of the country. The wide diffusion of branches under the Scotch banking system places a bank account within the reach of every small trader. The result, in connection with the interest allowed on deposits, has been to create a much greater number of deposit accounts from small tradesmen than in any other country. The facility of banking and the advantage of earning interest have tempted the Scotch tradesman to keep his spare cash in hand at the lowest minimum and to deposit his entire surplus in the bank. The payment of interest thus acts as a direct check upon excessive issues by bringing the notes back to the bank for deposit. The advocates of the Scotch

[1] The proof of the large savings of the Scotch people and their general use of banking facilities may be found in the bank returns for the United Kingdom for 1907 published on pp. 133–34, in Chapter V. These returns show that, in spite of the enormous wealth and banking business concentrated in the City of London, the deposit liabilities of the Scotch banks, divided by the population of Scotland, show a per-capita average of about £26, while those of England subjected to a like process show an average of about £24.

banking system blame the English banks for their failure to invite the available capital of the country into their coffers by the payment of interest.[1] If a Scotch banker issues a quantity of notes, he feels assured that nearly all of them will be paid into some bank in the course of the day. There was a competition among issuers, before the Act of 1845, but it was under the restraint of the theoretical rule of free banking, that the notes come back to the bank whenever they are issued in excess. Many of the English banks, however, have discouraged deposits and active accounts by charging a commission when the accounts were operated upon.

Deposit accounts and the payment of interest have thus operated at once to bring within the circle of productive industry every possible fraction of available capital, but they have operated also to apply constantly to the banks the touchstone of a sound and scientific currency,—the redemption and cancellation of their notes. These results could not be accomplished without the wide diffusion of branches. In spite of amalgamations, which dispensed with many old branches, the total number of offices increased from 812 in 1872 to 1256 in 1913, or an office to 3790 inhabitants. The methods by which they have accomplished such results, moreover, are not, in the language of M. Courcelle-Seneuil, "the exercise of a blind routine, the setting in motion of a sort of mechanism; they have been the employment of an enlightened judgment in their loans, the exercise of a high intelligence applied to business." The Scotch system of branches results in an even distribution of capital by withdrawing it from points where it is not needed and concentrating it where it is needed. The branches in the agricultural districts usually accumulate more capital than is needed within their own circuits and transfer it to the manufacturing districts, which are able to employ nearly all the capital they can obtain. This system kept capital within the country and the payment of interest on deposits contributed to deter the Scotch people from the reckless investments which

[1] Gilbart, II., 201.

have absorbed so many millions of English, French, and American money.

It was predicted, when the regulation of note issues was applied to the Scotch banks in 1845, that the result would be the reduction of the interest paid on deposits, and this prediction has been verified by events. A part of this reduction has undoubtedly been due to the accumulation of capital and the fall in its price in the money markets of the world, but a part is due to the increased cost of banking under the Act of 1845. A radical departure was taken from the old methods of Scotch banking, when the banks by a circular of October 1, 1892, gave notice that after that date the allowance of interest on creditor balances of current accounts would be discontinued.[1] No distinction was made in regard to the rate of interest, at the time of the Act of 1845 and for some years after, between deposit accounts and credit balances of current accounts. The rate allowed was the same on the two classes of accounts and seldom fell so low as two per cent. The rate in force on deposits for several years was one and a half per cent. and this was reduced in January, 1895, to one per cent. These low rates have destroyed much of the motive for depositing idle capital in the banks, and have driven the Scotch people to send their money to Australia and seek other and less secure investments than those which they formerly obtained at home by simply depositing their surplus in their current accounts with the banks.

V. The fifth great advantage of the Scotch banking system, that it has afforded an opportunity for entering upon business to thousands of poor but honest young men, is due chiefly to the system of cash credits. The Royal Bank found, soon after its organization, that it had more capital than it could employ in ordinary commercial operations on bills of exchange within the narrow circle of Scotch commerce. The result was the adoption of the system of cash credits for the promotion of agriculture and industry. The system consists in giving an open credit, or drawing account, to a customer who is vouched for by two or more trustworthy

[1] London *Bankers' Magazine*, April, 1893, LV., 577.

persons. A cash credit of £100 authorizes the person in whose favor it is granted to draw upon the bank for that amount, but he is not usually expected to draw the entire sum at once and is charged with interest only on the amount actually drawn and not repaid at any given time. The system differs, therefore, from the discounting of a bill of exchange in the fact that the money can be drawn piece-meal instead of in bulk and interest is charged only upon the portion of the loan actually outstanding. If payments are made from time to time into the bank, they are credited and the interest charged is reduced. The persons who vouch for the holder of the cash credit are called cautioners or sureties.

A cash credit, therefore, is in the nature of permission to overdraw an account up to a fixed limit. Cash credits are rarely given for sums below £100 and generally range from £200 to £500. The banks prefer these small sums, but sometimes grant such credits for £1000 or even larger sums. Payments upon these credits are made in the notes of the bank, which are thus kept in active circulation. Such a credit is not allowed to lapse into a dead loan of the aggregate amount, but it is expected that payments will intermingle with drafts upon it. It is intended as a working capital for men of good character engaged in trade or agriculture. It has the advantage over the ordinary method of loans by discount, not only that it is more economical to the borrower, but that it keeps within the control of the bank all sums not in active business use. The holder of a cash credit is not only benefited by paying into his account all the cash which he may receive from day to day, but he reduces the bank's outstanding loans by that amount and enables it to increase them in other directions.

The advantage of this system to Scotch industry has been incalculable, measured not only in shillings and pounds to the borrower, but in the stimulus which it has given to the thrift, frugality, honesty, and morality of the people. The two cautioners keep an eye upon the young man for whom they have vouched, have a right to know the state of his accounts, and if they find that his business is badly conducted,

they can withdraw their security and authorize the bank to call in the loan. The losses on cash credits have been trifling throughout the entire history of Scotch banking. Cash credits have been granted to manufacturers and large employers and to the trustees of great public works, as well as to young men setting up in business and to farmers desiring money in anticipation of the sale of their crops. Many distinguished Scotch manufacturers have testified that the system of cash credits was the foundation of their success in life. Mr. Monteith, a member of Parliament who testified before the Committee of the House of Commons in 1826, declared that he was then a manufacturer employing 4000 hands and that, except for the merest trifle of capital which was lent to him, and which he soon paid off, he began the world with nothing but a cash credit. The testimony before the same committee showed that upon one cash credit of £500 there were operations to the amount of £70,000 in a single year, and one witness stated that during twenty-one years in a country bank of moderate size operations took place to the amount of £90,000,000 and that there had been but one loss of £200 on a single account and that the whole loss of the bank during the entire period did not exceed £1200.[1]

VI. The confidence which has been produced among the Scotch people in the system of a banking currency as maintained by their banks was illustrated in a remarkable manner at the time of the failures of the Western Bank in 1857 and the City of Glasgow Bank in 1878. The run upon the Western Bank began on Tuesday, October 13, 1857, and continued for three days, but during that entire period the bank paid away only about £36,000, in coin, and for the entire month from October 10th to November 7th only £44,000. Deposits were drawn out to the amount of £1,280,000, but in nearly every case the depositors were willing to accept the notes of the bank and when it suspended operations the notes in circulation were still £720,000. The heaviest pressure upon the bank came after

[1] MacLeod, *Theory and Pratice of Banking*, I., 347.

the announcement that it would receive support from the other Edinburgh banks on condition of winding up. This pressure came, not from any demand for gold, but from large tradesmen who transferred their accounts to other banks in order to establish banking relations for the future.[1] The bank was unable to settle the heavy exchanges which were thus created against it in the settlement with the associated banks.

It was not until Sunday, November 8th, that the other banks resolved to refuse the notes of the Western Bank in consequence of its inability to settle its exchanges, and the demand for gold became more marked on Monday and Tuesday. The Western Bank closed on Monday and a genuine panic was directed for a day and a half against the City of Glasgow Bank, because it had been guilty of the same negligence as the Western Bank regarding the keeping of its reserve in London. The bank was obliged to close on Wednesday, but the demand for gold was almost entirely confined to depositors and very few note-holders came forward to demand payment of their notes. Large remittances of gold arrived from London on Wednesday and Thursday, the run on the banks ended on Wednesday afternoon, and the people seemed to retain the same confidence as ever in the other banks and received the notes even of the Western Bank when the other banks agreed to again receive them. When the City of Glasgow Bank failed in 1878, it was only necessary for the other banks to announce that they would continue to receive its notes, as usual, to put an end to all uneasiness on the score of the notes. If the banks on these occasions had not been allowed to issue notes, the entire demand for

[1] The same tendency to substitute the note obligations of the bank for a deposit account was shown in British North America after the failure of the Commercial Bank of Manitoba on July 3, 1893. The reason in this case for preferring notes was the fact that they were made by the Canadian banking act of 1890 a perfectly secured first lien upon the assets. The banks receiving these notes were willing to hold them for a time, at the request of the liquidator, because they bore six per cent interest until paid.—Breckenridge, 394–95.

the withdrawal of deposits must have been met in coin and would have put a heavy pressure upon the coin reserves. But the small notes were readily received, the deposit accounts of the solvent banks were not assailed and the Scotch banking system retained as completely as ever the confidence of the people.

The history of Scotch banking has been comparatively uneventful in recent years. The reduction of the interest paid on deposits and the investment of a large share of Scotch banking assets in London tended to prevent the rapid growth of resources and to assimilate the operations of the Scotch banks to those of other British joint-stock banks. The crisis of 1907, however, enabled the banks to increase their rate of interest on deposits temporarily to four per cent., which drew back some depositors.[1] The depreciation of consols, which caused losses to nearly all British banks, was responsible in part for the first banking amalgamation in Scotland since 1868. This was the absorption in 1907 by the Bank of Scotland of the Caledonian Bank. The latter, the smallest of the surviving Scotch banks of issue, with deposits of about £1,350,000, had been since 1878 working in harmony with the larger institution, but had not been conspicuously successful. The merger made the total assets of the Bank of Scotland at the close of 1907 £21,955,629, and put it at the head of all Scotch banks in magnitude of resources. The Bank of Scotland added the authorized note issue of the Caledonian Bank, which was £53,434, to its own previous issue of £343,418.[2] Another merger, in March, 1908, absorbed the Town and County Bank into the North of Scotland Bank, and reduced the number of banks in Scotland to eight. The authorized issue of the Town and County Bank was £70,133, and its assets on January 1, 1908, were £3,905,256.[3]

[1] London *Bankers' Magazine*, February, 1908, LXXXV., 230.
[2] *Ibid.*, August, 1907, LXXXIV., 170–72.
[3] *Ibid.*, April, 1908, LXXXV., 634.

CHAPTER VII.

BANKING IN IRELAND.

The Effect of Political and Economic Misfortunes—The Early Bankers and the Foundation of the Bank of Ireland—The Provincial Bank and Other Banks of Issue—The Collapse of the Agricultural and Tipperary Banks—The Act of 1845 and Present Conditions.

IRELAND has had almost as varied an experience in banking as in the political fortunes of her people and her banking history has been affected more or less unfavorably by the agitated condition of the country. The policy of England towards Ireland was distinctly selfish during the seventeenth and eighteenth centuries. Irish agriculture was crushed by the importation of bounty-paid wheat from England and Irish manufactures were stifled by countervailing duties intended to prevent their competition with English goods.[1] The linen trade was almost the only one which was allowed some degree of prosperity, upon the theory that it was better for England to draw her linen supply from a dependency than to pay foreign countries for it. This policy was changed from 1782 to 1800, while Ireland had an independent parliament, for the policy of large bounties and protective duties, and for a brief period Irish industry started forward by leaps and bounds under this artificial stimulus. But the country soon felt the heavy cost of the bounty system and prosperity began to decline before the union with Great Britain. The economic history of Ireland then became a part of that of England, and a reasonable degree of progress was made up to the time of

[1] Cunningham, II., 298, 523.

the potato famine in 1846. That event caused a loss of population by starvation and immigration which has never been recovered. Absentee landlordism also has been a permanent source of loss to the country by the large amount of produce and money annually sent abroad in payment for rents. The fact that bank deposits have increased and that Ireland has retained within her limits a large fund of gold and silver, in spite of these obstacles to her progress, is high evidence of the productive and thrifty character of the Irish people and the sound judgment of their bankers.

The earliest banking in Ireland seems to have been done by brokers or intermediaries, who brought borrowers and lenders together for a consideration. The business of issuing promissory notes against deposits of coin gradually grew up among the goldsmiths and tradesmen, who carried it on in addition to their regular callings. These notes were given a legal status as negotiable instruments by an Act of 1709, which made them assignable and transferable by endorsement. There were no banking laws to prevent fraud and failure, and the losses by the failure of banks or exchangers was estimated as early as 1682 at having been £50,000 within a few years.[1] The Act of 1709 gave the power to protest inland as well as foreign bills and promissory notes for non-acceptance or non-payment. The Irish House of Commons acted as a court of bankruptcy and a special act of Parliament was necessary for the liquidation of the affairs of an insolvent institution. The first act of the kind on record is in 1721, which was passed for the relief of the creditors of Mead and Curtis, a Dublin firm which had suspended on June 14, 1727. A bill for the relief of Burton and Falkiner of Dublin was passed in 1733 but the final legislation regarding the affairs of this firm was not passed until 1757. The firm had acted as bankers for the government and their failure seems to have been due to their large holdings of landed property, which could not be turned into cash when needed.

A series of failures took place in 1755 and 1756, which led

[1] Dillon, 17.

to the appointment of a select committee of the House of Commons to make an inquiry. They reported that credit had suffered by the setting up of persons as bankers without sufficient capital, and recommended that bankers be required to register the real and personal estate which they proposed to hold as security for the payment of their liabilities, that the names of the issuing bankers be stated on bank-notes, that bankers should not be permitted to trade as merchants, and that it should be made a felony without benefit of clergy for cashiers or clerks to embezzle money in excess of £50. The committee also recommended the cancellation of notes at the time of payment. These recommendations, except that regarding the registration of security, were embodied into law in 1755 (29 George II., c. 16). This act did not entirely revive credit and four important banking failures took place in 1758 and in 1760. The first was that of Clements, Malone, and Gore, a firm established on July 3, 1758, which closed its doors on November 1st, of the same year. This firm issued deposit notes payable to bearer on seven days' notice with interest at the rate of ten pence per week for every £100 (two and one-sixth per cent. per annum). The deposits obtained were larger than were expected and were invested largely in land, but the depositors soon began to demand repayment of their notes and as cash could not be obtained the firm was obliged to suspend. [1]

Three of the six large banking firms in Dublin suspended in 1760 and the others refused to discount bills and practically suspended business. Among the firms which remained solvent was that of Messrs. La Touche and Co., which began business in 1725 and survived as a banking house until its fusion with the Munster Bank in 1878. The financial condition of the country and the state of credit were in such a situation that a meeting of the merchants of Dublin was held in April, 1760, which made an appeal to Parliament for relief. A committee of inquiry was named by the House which reported on April 23, 1760, that the quantity of paper in circulation was insufficient to carry on trade and manufac-

[1] Dillon, 23.

tures, and recommended support for the three surviving banks to the amount of £50,000 each. This recommendation was adopted and the notes of these bankers were received as cash in the subscription for a loan which was then being raised. The failure of Sir George Colebrook, Bart., and Company, London bankers who had opened a branch in Dublin, in 1764, was the cause of another panic in 1770 which led the Lord Lieutenant and some of the gentry to issue a notice pledging themselves to receive the notes of the existing Dublin bankers without question.

The effort to found a strong joint stock bank began the year after the foundation of the Bank of England. A number of the principal merchants of Dublin held a meeting in 1695 and presented a memorial to the Irish House of Commons on September 17th, recommending the establishment "of a public bank or a fund of credit, for the encouragement of trade, and supply of the present want of money." The petition was referred to the committee on trade, but was never reported upon. The matter was revived in 1720 by Lord Abercorn, Lord Boyne, and others, who petitioned the King for authority to found a public bank with a capital of £500,000. The Lords Justices reported in favor of the scheme and the King authorized the Lord Lieutenant to grant a commission and charter. The consent of the House of Commons was required for a proper bill and the early stages were favorably passed. Charges of jobbery began to be made against the promoters of the bank, a rival scheme was started with a capital of £1,000,000, whose promoters were charged with paying £50,000 to members of the House as bribes, and the outcome was the passage of a resolution on December 9, 1721, "That the erecting or establishing a public bank in this Kingdom will be of the most dangerous and fatal consequence to his Majesty's service and the trade and liberties of this nation." Religious, political, and financial reasons influenced the action of the House, but a stronger reason was probably found in the infringement of the privilege of originating legislation, which they jealously guarded.

The plan of a public bank remained in abeyance until

1782, when Ireland obtained a new constitution, was freed from humiliating tariff restrictions and believed herself upon the threshold of a new era of prosperity. Mr. Eden, the Secretary to the Lord Lieutenant, presented the heads of a bill for a bank on February 27, 1782. Some opposition developed among the existing bankers and their friends in the House and when Mr. Eden called the bill up on March 5th, the opponents of the bank endeavored to secure an adjournment, but the motion was lost and the report of the committee was agreed to. The capital of the bank was fixed at 600,000 Irish pounds,[1] of which no person was to subscribe more than £10,000, and which was to be lent to the government at four per cent. The charter was to run until January 1, 1794, and until twelve months' notice of withdrawal and the re-payment of all sums due the bank by the government. The bank began business June 23, 1783, and as early as October 31st, of the same year Mr. David La Touche, Jr., was able to inform the House of Commons that great advantages had resulted, particularly to the traders in linen. The first offices of the bank were in some old houses in Mary's Abbey, but after the union of Great Britain and Ireland in 1802, the directors of the bank purchased the Parliament house for £40,000. They remodelled it to meet their requirements and established the bank there in 1808. The meetings of the directors and shareholders are held in the old chamber of the Lords and the general office occupies the old House of Commons.

The new institution was known, in similar language to that establishing the Bank of England, as "The Governor and Company of the Bank of Ireland," and was not allowed

[1] The coinage of Ireland, although bearing the same names, differed from that of Great Britain. The English shilling was passed in Ireland for thirteen pence, although twelve Irish pence were equal to a shilling and twenty shillings to a pound. This made English coins worth about eight per cent. more than Irish coins of the same names and led to much confusion until the currencies were assimilated by the Act of 6 George IV., c. 79, making the currency of Great Britain that of the United Kingdom and providing for the interpretation of contracts in its terms.

to charge more than five per cent. interest on loans and discounts. If the bank incurred debts to a greater amount than its capital, the subscribers were answerable in their private capacity to the creditors in proportion to their subscriptions. The stock was to be transferable and to be deemed personal estate, and as such to go to the executors of the holders rather than their heirs. Fifteen directors were to be chosen annually, not more than two-thirds of the directors of the preceding year were to be re-elected, and the corporation was to have a governor and a deputy governor. The charter of the bank was renewed in 1791 and the capital increased to £1,000,000. Another increase of £500,000 was made in 1791, and still another increase of £1,000,000 was made in 1808 by 48 George III., c. 103. The charter was extended at this time until the expiration of twelve months' notice after January, 1837. The last increase of capital was made in 1820, when the total was fixed at £3,000,000 in Irish currency (equivalent to £2,769,231 in English currency). This last increase was taken from the surplus fund of the bank and lent to the government, making the aggregate loans to this date £2,630,769 in English currency. The total annuity paid the bank by the government was fixed at £115,384, which was reduced in 1845 to £92,076, or at the rate of three and a half per cent. on the English equivalent of the amount of the loan, and was further slightly reduced in 1892.

The suspension of cash payments in England in 1797 was extended to Ireland, without any apparent necessity, "for the sake of uniformity." Exchange was then in favor of Ireland, there was no special demand upon the Bank of Ireland and no drain of gold was feared. The effect of suspension, however, was to enormously stimulate the issue of notes, which increased from £621,917 in 1797 to £2,482,162 in 1800, £3,068,100 in 1809, £4,212,600 in 1813, and finally reached £5,182,600 in 1821 and £6,309,300 in 1825. Exchange turned against Ireland as early as 1804 and led to the special inquiry by the British Parliament which resulted in the formulation of the principles afterwards repeated with

greater elaboration in the Bullion Report. The evidence showed that silver had disappeared from circulation, even for subsidiary purposes, and been replaced by silver notes. Mr. Colville, a director of the Bank of Ireland, testified that there were in Ireland seven bankers issuing notes ; 28 issuers of gold and silver notes, 62 issuers of silver notes ; and 128 issuers of I. O. U's.[1] The Bank of Ireland made large profits upon its forced circulation, and paid dividends never less than six and a half per cent. and rising in 1803 and 1805, including a bonus, to twelve and a half per cent. Exchange on London became favorable after a time, not because the value of Irish currency was raised, but because that of England had fallen to its level.

The substantial monopoly of joint stock banking by means of note issues was conferred upon the Bank of Ireland by the act of incorporation, which declared that it should "not be lawful for any body politic or corporate, erected or to be erected, other than the corporation thereby intended to be created and erected into a national bank, or for any other persons whatsoever united or to be united in covenant or partnership exceeding the number of six persons, to borrow, owe, or take up any sum or sums of money on their bills or notes payable at demand, or at any less time than six months from the borrowing thereof." This provision left it in the power of individuals and firms of small numbers to issue notes, and this privilege was availed of to a great extent after the suspension of cash payments. Nothwithstanding the worthless character of many of these institutions, the demand for currency was so imperative that large quantities of notes were easily floated and great distress occurred, after 1820, when the number of institutions outside the Bank of Ireland had been reduced to six. The Bank of Ireland was permitted by an Act of 1821 (chapter 27) to resume cash payments on June 1st of that year.

The absence of a proper circulating medium, in spite of the monopoly enjoyed by the Bank of Ireland, led to a pro-

[1] MacLeod, *Theory of Credit*, II., 609.

vision in the act which increased the capital of the bank,[1] that the bank should surrender its monopoly outside the circuit of fifty Irish miles from Dublin. Companies of more than six partners were henceforth authorized to do a banking business and to issue circulating notes outside the proposed limit. A party of English capitalists determined to take advantage of this provision and at a meeting in London on June 11, 1824, resolved to found a bank with a capital of £2,000,000 in shares of £100 each, of which one-fourth was to be paid up. Subscriptions were received far beyond the amount needed before the end of the year and the capital of the Provincial Bank of Ireland, which was thus established, has never been increased except in 1836, when £40,000 was transferred to the capital from the "rest" or reserve fund. The monopoly enjoyed by the Bank of Ireland in Dublin made it necessary to keep the head office of the new bank in London, but an agency was established in Dublin and Messrs. La Touche and Company acted as agents until 1838, when the bank opened its own office.

The Provincial Bank rapidly extended its branches throughout Ireland, establishing them at Cork, Limerick, Clonmel, and Londonderry in 1825; at Sligo, Wexford, Belfast, Waterford, and Galway in 1826, and at other towns in successive years. The Bank of Ireland, which had been content with its head office until it found competitors in the field, began a policy of opening branches and established them at Cork, Waterford, Clonmel, Londonderry, Newry, Belfast, and Westport almost as soon as the prospectus of the Provincial Bank had appeared. They began an action of law against the Provincial Bank in December, 1828, because of the payment of the latter's notes in Dublin. The jury found in favor of the Bank of Ireland upon the law and the evidence, but awarded damages at sixpence, with costs of a like amount, as evidence of the feeling in the business community of Dublin against the narrow policy of the bank. The restiveness of the merchants was further indicated in a petition to the Lords of the Treasury for the establishment

[1] 2 George IV., c. 72.

of joint stock banks in Dublin, which led to a compromise. An Act was passed in 1830, making lawful the payment of notes in Dublin by the issuing bank for the purpose of withdrawing them from circulation. The Provincial Bank obtained the privilege in 1827 of receiving the revenues of the excise, stamps, and postal service outside the Dublin district reserved to the Bank of Ireland. Collectors of revenue were authorized in the same year to receive the notes of the bank in the same manner as those of the Bank of Ireland.

The Acts of 1820 and 1825 made it possible to establish joint stock banks in different parts of Ireland and several of these were soon incorporated. The first was the Northern Banking Company, founded by the partners of a private bank of the same name in Belfast. An attempt was made to convert this bank into a joint stock bank in 1820, but it was found necessary to await a change of the law requiring the residence of all the partners in Ireland. The bank began business in its new character in January, 1825, with a capital of £500,000. The capital was increased in 1867 to £1,000,000 and has since been increased to £2,000,000, of which £400,000 has been paid in. The Northern Banking Company purchased the business of Messrs. Ball and Co., of Dublin in 1888 at a cost of £22,500 and opened an office at the capital. The Belfast Banking Company was another institution which was founded upon a private company. It began business as a joint stock bank of issue on August 1, 1827, with a capital of £500,000, of which £125,000 was paid in. The capital was increased in 1866 to £1,000,000 and in 1883 to £2,000,000 with £400,000 paid in.

The National Bank of Ireland was founded in 1835 as the result of the Nationalist feeling in the country. It began business at the Carrick-on-Suir with a subscribed capital of £1,000,000 and consisted at first of separate bodies of shareholders, English and Irish. When a branch was opened, the local share-holders subscribed a portion of the capital and the English proprietors contributed a like amount. The profits were divided evenly between the two interests, but the system proved inconvenient and the stocks were

consolidated in 1837 except in two branches, where the consolidation was delayed until 1856. Daniel O'Connell was the first governor of the bank and his name caused the institution to be dubbed "The Liberator's Bank" and made way for its notes all over Ireland. The only other bank of issue which is still doing business is the Ulster Bank, founded in 1836, at Belfast. The capital was originally £1,000,000, which has since been increased to £2,400,000, with £400,000 paid up. The profits paid in dividends to the shareholders were twenty per cent. annually from 1866 to 1885 and have been only a little less in subsequent years. The Royal Bank of Ireland was established at Dublin in 1836, but was restrained by the monopoly of the Bank of Ireland from issuing notes, and was found in this condition in 1845 by the legislation confirming the power of issue to the banks which then possessed it. The Royal Bank, although a powerful and profitable institution, was, therefore, never enrolled among Irish banks of issue.

The foundation of the National Bank was intended to offset in a measure the collapse of the Agricultural and Commercial Bank of Ireland, which was established in 1834 by the appeals of a Dublin baker, Mr. Thomas Mooney, to the patriotism of the Irish people. Mr. Mooney bore the same name as a Dublin capitalist of wealth and standing and he secured as one of the directors a stationer named James Chambers, which was also the name of a distinguished Dublin financier who was a director of the Bank of Ireland. The impression generally prevailed that these two eminent gentlemen were interested in the new bank and Mr. T. M. Gresham, who was brought into the bank just before its collapse, testified before a committee of the House of Commons that "there is no manner of doubt that we were all deceived in two names in that bank." The capital of the Agricultural Bank was gathered up from all sorts of humble people by appeals to their Irish patriotism and parts of it were obtained by liberal discounts to those who presented commercial bills. A meeting of the shareholders after the collapse of the bank was attended by two steamboat-loads

from Belfast, most of whom had their expenses paid by the directors, and another contingent came from the south of Ireland in canal boats. The branch managers of the bank were selected according to their holdings of stock and acted in reckless disregard of orders from the head office, even to the extent of raising their own salaries and dating the increase back to the time of their appointment.[1] The nominal capital of the Agricultural Bank was £1,000,000, but it was admitted that at the time of beginning business it did not actually exceed £3,000. The first branch was opened at Nenagh, Tipperary County, in November, 1834, and the bank was compelled to close its doors on November 14, 1836. A special act of Parliament was required to wind up the affairs of the bank and an attempt to put it on its feet under a new organization failed in 1841.

The Tipperary joint stock bank, which succeeded Scully's private bank in 1838, did not issue its own notes, but had an arrangement with the Bank of Ireland by which its paper was discounted. The power was reserved to the Tipperary bank by the Act of 1845 to take the same amount of issue as it would have been entitled to in case of the termination of the agreement with the Bank of Ireland, so that it was recognized as connected with the system of banks of issue. The directors of the institution when it became a joint stock bank were John Sadlier, his brother James, and Mr. James Scully. The capital of the bank was £100,000, a portion of which was held in England, and favorable reports were regularly made and large dividends declared for some seventeen years. Prosperity seemed to reign in the affairs of the bank until February, 1856, when the doors were closed, less than a month after the issue of a favorable report and the declaration of a dividend. It was found that John Sadlier had systematically robbed the bank and falsified the accounts. Sadlier was one of the brilliant swindlers who so often take the world by storm and persuade shrewd men of business to embark with them in great enterprises. He had piloted through Parliament several important railway bills, obtained

[1] Dillon, 71–77.

the reputation of immense wealth, been elected member of Parliament for Carlow, and was offered and accepted the position of a Junior Lord of the Treasury. He became chairman of the London and County Bank in 1848, chairman of the Royal Swedish Railway and a director in numerous stock companies. Towards the close of his career he indiscriminately used all the funds of either corporation he could lay his hands on, issued duplicate shares in the railway company and forged documents which he deposited as security for advances from other bankers. His forgeries began to be suspected, the Tipperary Bank collapsed, and on February 17, 1856, Sadlier's body was found by a laborer crossing Hampstead Heath, lying on the ground with a bottle labelled "poison" beside it.[1]

The Banking Act of 1845, following the similar legislation for England and Scotland, repealed the acts of Parliament which prohibited the formation of stock companies for banking with more than six partners. This threw down the bars to all comers, so far as the organization of banks of discount and deposit was concerned, but circulation was put in a straight jacket, as in the case of the English banks. The authorized issue of circulating notes after December 6, 1845, was not to be permitted to exceed, upon an average of four weeks, the average amount of the circulation for the year ending on the first day of May, 1845.[2] If any two banks united, they were allowed to maintain the aggregate authorized circulation of both the old banks, and if any bank surrendered its issue or agreed to issue Bank of Ireland notes, the Bank of Ireland was allowed to increase its issues to the full amount of the notes withdrawn. The law differed in this respect from the English act, which limited the increase in Bank of England issues in such cases to two-thirds of the issues withdrawn.

The Irish law differed in an important respect from the English banking act in regard to the additional circulation

[1] Dillon, 81–86.

[2] 8 and 9 Victoria, c. 37, sec. 19.

which the banks were authorized to issue against deposits of coin and bullion. This privilege was accorded to all the Irish banks of issue,—instead of but one, as in the case of England,—and they were thus put upon an equal footing with no apparent purpose of concentrating issues finally in a single institution. The Irish banks are required, however, to keep the coin held against additional circulation wholly at their head offices, while all their notes are required to be redeemed on demand at the place or places where issued. These requirements compel them to keep a supply of coin at every branch, in order to redeem notes issued from that branch, and it is the practice for a bank to redeem any of its notes at any of its branches where they may be presented. The fact that the privilege of additional issues has been availed of to only a limited extent, while the coin holdings of the banks have been large, would seem to indicate that the fixed limit of authorized issues has not operated greatly to restrain the business development of Ireland. One reason for this is doubtless found in the fact that the population and the volume of business were so greatly decreased in the famine years, while the authorized circulation remained untouched. The limit has proved in practice so generous that Ireland has enjoyed a currency fluctuating with the seasons and with the varying demand for money, in much the same manner as an untrammelled banking currency.

The circulation was nearly £1,000,000 above the limit in 1846, standing at £7,266,000, but declined as low as £4,310-000 in 1849. The average returned in 1854 to £6,296,000 and increased pretty steadily until 1860, when it stood at £6,840,000. A decline then set in, which reached its lowest ebb in 1863 at £5,405,000. Another period of increase carried the average circulation for 1872 as high as £7,674,000, after which it fell to £6,065,000 in 1879, rose to £7,297,000 in 1882 and fell to £5,885,000 in 1887,—the lowest average for twenty years. The authorized circulation of each bank, with the circulation and specie holdings for the four weeks ending July 25, 1908, is shown in the following table:

Circulation of Irish Banks.

NAME OF BANK.	AUTHORIZED CIRCULATION.	AVERAGE CIRCULATION FOR FOUR WEEKS.	AVERAGE AMOUNT GOLD AND SILVER HELD FOR FOUR WEEKS.
Bank of Ireland.....	£3,738,428	£2,509,750	£ 973,771
Provincial Bank of Ireland	927,667	685,927	251,012
Belfast Bank.....	281,611	494.867	344,528
Northern Bank.....	243,440	533,727	430,506
Ulster Bank.....	311,079	885,088	755,951
The National Bank.....	852,269	1,181,748	696,337
Total.....	6,354,494	6,291,107	3,452,105

The average circulation of these banks for February, 1914, was £8,064,349, of which £2,694,458 was in notes for less than £5.

The elastic character of the Irish currency, in spite of the restrictions of law, gives an interest to the fluctuations during the year which result from the varying demand for money. Beginning with January, the amount of the circulation usually declines,—slowly at first, but more rapidly in May, June, and July, until it reaches its lowest point at the end of August. Then begins the process described by Mr. Gilbart, as a consequence of the law that "the monthly circulation must depend upon the quantity of produce brought to market within the month":

> Now, it has been the custom in Ireland to commence bringing the produce to market immediately after the harvest. Hence arises the increase of the notes in September, and their further increase in the following month. But in the beginning of the year the landlords collect their rents, and receive from their tenants the notes for which this produce has been sold; this brings the notes back to the bank, either to be placed to his credit (if he have an account there), or, otherwise, in exchange for a letter of credit on Dublin, or a bill on London. The circuit of a note, then, is this:—It is obtained from the bank by a corn-merchant, who pays it to a farmer for his corn, which he ships to England. The farmer afterwards pays the note for rent to his landlord, who brings it back to the bank. [1]

One of the peculiar features of the Irish circulation, like the Scottish, is the large proportion of small notes. The

[1] *The History, Principles, and Practice of Banking*, II., 250.

Select Committee of the House of Commons in 1826 recommended fixing a limit of time in the future beyond which the circulation of notes below £5 should cease, but the testimony given before the committee was against such a restriction and it was not adopted. The arguments made against the restriction were that it would check the growth of manufactures, make difficult the sale of small lots of agricultural produce, and curtail the accommodation which the banks are able to give their customers and especially their cash credits. The transfer of gold, it was pointed out, would be inconvenient and costly, and once sent out of the country it would rarely come back. The Act of 1845 prohibited notes of fractions of £1 and required the banks in their reports to state separately the notes in circulation under £5. These returns have shown a large proportion of small notes in circulation and a marked increase from September to January over the spring and summer months. This circulation of small notes has contributed, with the widely diffused system of branches, and the existence of several strong joint stock banks without the power of issue, to afford reasonably adequate facilities for the development of banking in Ireland. The number of banking offices in Ireland increased from 333 in 1872 to 571 in 1895 and 863 in 1913.

CHAPTER VIII.

THE BANKS OF GERMANY.

The Bank of Prussia and the Share of the State in its Profits—Other Banks of Issue in Prussia and the Smaller States of Germany—The Reform of Currency and Banking under the Empire—The Sales of Silver and the Withdrawal of Paper Money—Legal-Tender Character of the Bank-Notes and the Reforms of 1909.

THE existing banking system of the German Empire is a part of the fabric of imperialism which was so industriously built up by Prince Bismarck from the beginning of his premiership in 1862 until his retirement from office. The Imperial Bank of Germany is in a measure an expansion and development of the Bank of Prussia, which was founded in the time of Frederick the Great, but it has already absorbed the circulation belonging to the banks of most of the other German states and is authorized to absorb the entire paper circulation of the Empire as it is surrendered by the local banks, in much the same manner as the Bank of England is authorized by the Act of 1844 to absorb the circulation of the country banks of England and Wales. The circulation of the Imperial German Bank, while modelled in many respects on that of the Bank of England, is capable of a somewhat greater degree of elasticity, by virtue of a legal provision for an emergency circulation above the usual limit, and the notes are now legal tender.

The Bank of Prussia was created by virtue of an edict of June 17, 1765, under the name of the Royal Bank of Loans and Current Accounts at Berlin (*Konigliche Giro- und Lehnbank zu Berlin*) with a capital of 1,000,000 thalers ($750,000)

and was at first exclusively an institution of state. It continued to be a state institution until 1846, when the new demands for capital for railways and for the extension of commercial relations led to an extension of the scope of the bank and an appeal to private capital to carry it on. Two ordinances of April 14 and July 18, 1846, authorized the increase of the capital by a sum of 10,000,000 thalers ($7,500,000) and admitted the shareholders to a part in the administration by means of a central commission composed of fifteen members, who were authorized to appoint a commitee of three to exercise a regular supervision over the acts of the directors.[1] The capital owned by the State had been increased by the setting aside of profits until it had reached in 1846 1,197,553 thalers ($900,000), and the portion furnished by the public was increased in May, 1856, to 15,000,000 thalers and again by the law of September 24, 1866, to 20,000,000 thalers, ($15,000,000), divided into shares of a par value of one thousand thalers each. The capital credited to the state had been increasing in the meantime until it attained in December, 1867, a total of 1,897,800 thalers ($1,425,000).

The government took care to keep its hands firmly on the direction of the bank, in spite of the new privileges given the shareholders, and limited the right to participate in the general assembly of shareholders to the two hundred holding the largest amount of stock domiciled in Prussia. Supreme control was reserved directly and exclusively to a privy council (*Bank Kuratorium*), composed of the President of the Council of Ministers, the Ministers of Finance, of Justice, and of Commerce, and a fifth member named by the King. The direct management also was confided to a director and a committee of direction appointed upon the King's nomination. This official control was compensated in a measure by exemptions from imposts and from certain taxes which were imposed upon other similar establishments. The bank was compelled, however, to pay interest on the deposit of the public funds and to pay three and a half per

[1] Noel, I., 246.

cent. upon the capital contributed by the State and half the net profits remaining after the payment of a dividend of a like amount to the shareholders. The receipts of the government from these sources, including interest on its own stock, attained a very considerable figure during the eight years prior to its transformation into the new Imperial Bank, amounting to 3,166,436 thalers in 1873; 1,711,920 thalers in 1874; and 2,284,875 thalers in 1875.

The accounts of the Bank of Prussia afford a good illustration of the principle that banks of issue usually precede mere banks of discount and deposit as a means of familiarizing the public with banking methods. There were scarcely any deposits in the early history of the bank, except those made by the government and upon which interest was paid by the bank. These government deposits came from the trust funds of the courts, including those of guardianship, and the administration of churches, schools, hospitals, and other charitable foundations and public institutions. Their magnitude constantly grew and their use by the bank gave it loanable funds which it could not otherwise have obtained except by an issue of notes upon commercial paper disproportionate to its original capital. This money entrusted to the bank enabled it to do a discount business which steadily grew with the expansion of commerce in Prussia and among her neighbors. The aggregate of the discount business of the year rose from 1,581,956,399 marks ($395,000,000) in 1867 to 2,630,469,468 marks in 1871, 3,958,299,756 marks in 1872, and 5,350,216,312 marks in 1873. The business depression which began in the latter year forced the discounts down to 4,136,089,162 marks in 1874 and to 4,099,613,175 marks ($1,025,000,000) in 1875.

One of the peculiarities of the Bank of Prussia, which extended to many other German banks, was the practice of making loans upon merchandise as well as upon bullion and the pledge of securities. Business of this kind was always kept within conservative limits and the statutes of the Bank of Prussia admitted the precious metals at a valuation of only 95 per cent. of their real value and merchandise at

from 50 to 60 per cent. The valuation of negotiable securities was determined by the officers of the bank. All these operations were limited in amount and were required to run for terms no longer than bills of exchange, for which the maximum was three months. The number of loans of this sort steadily declined during the latter years of the history of the bank, while the amount increased, reaching a maximum in 1872 of 824,840,690 marks ($206,000,000), including securities.

The issue of circulating notes was the chief means by which the Bank of Prussia was able to utilize its assets and there was no limit of law after 1856 upon the volume of the issues. The law of 1846 forbade the issue of bills for a greater sum than 21,000,000 thalers ($15,750,000), but the repeal of this provision in 1856 left the bank untrammelled, except as the opinion of the banking community imposed a relation of one to three between the metallic reserve and the circulation. The bills were not a legal tender and were redeemable in coin on demand, but they were accepted in public depositories by virtue of a royal ordinance of June 9, 1847. The denominations were limited to ten, twenty-five, fifty, one hundred, and five hundred thalers, equivalent to a minimum of $7.50 and a maximum of $375. A further limitation was imposed that bills of the smallest denomination should not exceed a total of 10,000,000 thalers ($7,500,000), and in fact their number never surpassed 957,000 in the ten years preceding consolidation with the Bank of the Empire and had descended in 1875 to 520,000 ($3,900,000). The maximum note circulation in 1860 was 93,029,000 thalers ($70,000,000); in 1865, 136,148,000 thalers, and 1870 202,488,000 thalers. The increase was more rapid in the next few years and carried the maximum in 1871 to 242,242,000 thalers; in 1872, to 311,531,000 thalers; in 1873 to 342,290,000 thalers; and in 1874 to 297,412,000 thalers.

The reserve of the Bank of Prussia consisted of gold and silver coin and bullion, public securities, bills of Prussian private banks, and securities payable at sight or otherwise and until 1869 of accepted drafts (*Giro-Anweisungen*). The

total of this reserve reached in 1875 about 1,900,000,000 marks ($475,000,000). The proportion of coin and bullion seldom exceeded one-third of this aggregate. The maximum in 1860 was 77,457,000 thalers ($58,000,000) and had only reached 99,427,000 thalers in 1870. The rapid increase of the number of branches of the bank scattered over Prussia and the growth of commercial operations led to an increase in the reserve during the last four years of the operations of the bank commensurate with the increase in its circulation and discounts, so that the maximum in 1874 was 239,860,000 thalers ($180,000,000) and the minimum was 203,511,000 thalers ($152,000,000). The Bank of Prussia, in spite of the share which the government enjoyed in its profits, had no monopoly of the right of note issue in the Kingdom. By its side and in competition with its numerous branches existed eight local banks, including one at Berlin, whose united capital was 8,899,000 thalers ($6,675,000) and which had the right to issue bills to the amount of 7,000,000 thalers, but in no case of a smaller denomination than ten thalers ($7.50).[1] The branches of the Bank of Prussia increased from 143 in 1867 to 158 in 1870 and 167 in 1875.[2]

The other German states were not without flourishing banks of issue, which conformed in the general features of their organization to the Bank of Prussia. There were thirty-three German banks in existence, including those of Prussia, when the Imperial Bank was established in 1875. Two of these were commercial banks and one was a territorial bank, the capital in each of these cases being furnished by the municipality or the State and the liabilities constituting a general claim against the government and the community. The others were organized as stock companies. Three of the German banks—the Bank of Bremen, founded in 1856; the Bank of Thuringia, founded in 1856; and the Bank of Anhalt-Dessau, founded in 1847—held charters without limit of time, which were regarded as perpetual. The char-

[1] Courcelle-Seneuil, 365.

[2] Noel, I., 250.

ters of the other banks ran for various periods from one year to eighty-one years. The charters of the Bank of Gera, which expired in 1953, and of the Banks of Central Germany and Lower Saxony, which expired in 1956, had been granted originally for one hundred years.

The oldest of the banks with limited charters was that of Pomerania, established at Stettin in 1821, with a capital of 6,000,000 marks. The others were: The Bavarian Bank of Mortgage and Exchange at Munich, founded in 1834; the Bank of Leipzig, in 1839; the Communal Bank of Breslau, in 1848; the Communal Bank of Chemnitz, in 1848; the Bank of United Deposits of Berlin, in 1850; the Bank of Rostock, in 1850; the Bank of Weimar, in 1853; the Bank of Gera, in 1854; the Bank of Frankfort, in 1854; the Bank of Southern Germany, at Darmstadt, in 1855; the Bank of Cologne, in 1856; the Bank of Magdeburg, in 1856; the Private Bank of Lubeck, in 1856; the Territorial Bank of Hesse, at Homburg, in 1856; the Bank of Hanover, at Hanover, in 1856; the Private Bank of Gotha, in 1856; the Bank of Central Germany, at Meiningen, in 1856; the Bank of Lower Saxony, at Buckebourg, in 1856; the Bank of Dantzig, in 1857; the Bank of Pozen, in 1857; the Bank of Brunswick, in 1857; the Commercial Bank of Lubeck, in 1865; the Bank of Saxony, at Dresden, in 1865; the Territorial Bank of Gorlitz, in 1866; the Bank of United Deposits, at Leipzig, in 1867; the Territorial Bank of Oldenburg, in 1868; the Bank of Baden, at Mannheim, in 1870; and the Bank of Wurtemburg at Stuttgard, in 1871. The Prussian banks in this list are those at Stettin, Breslau, Cologne, Gorlitz, Magdeburg, Dantzig, and Pozen, and the Bank of United Deposits at Berlin.

Many of these banks were born of the financial necessities of the governments by which they were chartered and were under obligations to aid the public Treasury. The Bank of Homburg was required to loan to the government up to a maximum of 100,000 florins ($42,000) at three per cent.; the Bank of Gotha was required to advance to the Treasury a maximum sum of 200,000 thalers ($150,000) at four per

cent. ; the Bank of Bremen was required to loan a maximum of 200,000 thalers, and the Bank of Buckebourg was under obligations to make advances to the amount of 400,000 thalers without interest, on the condition that the government deposit public securities paying an interest of four per cent.[1] The State exercised a more or less complete control over all these local banks, in some cases appointing the officials and in others limiting its action to inspection and suggestion. The Banks of Bremen and Frankfort were among those enjoying comparative freedom, being subject only to public control when it was judged desirable.

The operations of these banks before 1875 consisted, like the operations of the Bank of Prussia, in the discount of commercial paper, the negotiations of foreign and domestic bills of exchange, advances upon public stocks and the precious metals and in some cases upon mortgages, and the pledge of securities and property. The building of railways, the increased productive power of the community, and the consequent increase in capital, brought a rapid extension of business to the German banks during the ten years before they become subordinate to the German Imperial Bank. The aggregate commercial discounts of all except the Bank of Prussia increased from 126,629 in number and 693,420,537 marks ($167,000,000) in amount in 1867 to 535,302 in number and 2,797,759,142 marks ($675,000,000) in amount in 1874. The management of the local state banks was for the most part prudent and conservative and they were doing a safe and profitable business when they were arrested in their growth by the policy of consolidation. Most of them had branches in the neighboring towns and cities, reaching a total of nearly fifty establishments besides the parent banks. They were required by the laws of most of the states to set aside a portion of their profits as a reserve fund and this fund increased from 12,270,712 marks ($3,000,000) in 1867 to 34,332,457 marks ($8,200,000) in 1875.

The aggregate circulation of the banks outside the Bank

[1] Noel, I., 263.

of Prussia was 181,635,305 marks ($45,000,000) in 1867, 242,502,653 marks in 1869, 432,799,730 marks in 1872 and 487,020,519 marks in 1874. The circulation of the Bank of Prussia on the latter date was 838,422,000 marks, making a total bank-note circulation for all the states of Germany of 1,325,442,519 marks ($320,000,000). The banks showing the largest circulation in 1874 were those at Dresden, 99,727,440 marks; at Mannheim, 51,901,428 marks; at Darmstadt, 46,327,015 marks; at Frankfort, 45,208,833 marks; at Leipzig, 28,464,069 marks; at Stuttgard, 25,477,028 marks; and at Meiningen, 24,000,000 marks.

The narrow limits of many of the German states and their commerce with each other led to the mutual circulation of their bills in spite of the absence of any legal tender quality even within the limits of the state where they were issued.[1] The banks of some of the smaller states took advantage of the wide circulation of their bills, and the lack of requirements for prompt redemption, by swelling their issues and by various artifices for getting the notes into circulation at distant points. Though legally redeemable in coin on demand, the small denominations of the notes and the difficulty of getting them to the counters of the issuing banks threatened to create a practically irredeemable and redundant currency, which would expel coin and bring the country to a paper basis. "They might without difficulty have remedied this abuse," says M. Courcelle-Seneuil, "by means of a system of mutual exchange and liquidation among the banks themselves, such as is practised in Scotland, and the principal banks had in their hands every power to enforce this exchange upon the banks of the small states."[2] But other means of reaching the difficulty were adopted, and the initiative was taken by Prussia, which passed an act on May 14, 1855, forbidding the circulation within her limits of for-

[1] The legal tender quality was not given by law to the notes of any of the German banks and was expressly disclaimed by the laws incorporating the banks of Pomerania, of Frankfort, of Homburg, of Meiningen, and of the United Deposits at Berlin.—Noel, I., 284.

[2] *Traité des Opérations de Banque*, 366.

eign bills payable to bearer, without interest, of a value below ten thalers. Saxony took similar action on July 8, 1855, and the small states of Thuringia concluded a convention January 21, 1856, by which they forbade the circulation of foreign bills to bearer without interest and below ten thalers in denomination, with the exception of the bank drafts of Prussia and Saxony. The Grand Duchy of Baden forbade the circulation of any foreign bills on December 24, 1855, except those issued in Prussia, Bavaria, and Nassau and at Frankfort. Prussia extended the scope of her prohibition on May 25, 1857, to all foreign bills except those below ten thalers issued by the governments of Saxony, Thuringia, and Anhalt. A Saxon ordinance of May 18, 1857, imposed a fine of fifty thalers upon the holders of foreign bills below the denomination of ten thalers except upon banks of issue which carried on a special service of exchange.[1]

The history of the circulation of these state bills outside of the limits of the issuing state suggests an interesting comparison with the circulation of the notes of the departmental banks of France and of the State banks of the United States. The banks were not in any of these cases closely linked together by clearing arrangements and the means of communication and the promptness of commercial transactions were not such as to result in the prompt return of the notes to the issuing banks for redemption. It does not appear that this resulted in a great inflation of the note issues, even in the United States,[2] but it naturally aroused fears that the banks might not be able to redeem their notes promptly on presentation and that they might fall below par

[1] Noel, I., 288.

[2] M. Wolowski, who is one of the warmest champions of monopoly of note issues, speaking of the situation in 1863, says: "Twenty banks issuing 45,000,000 thalers ($33,000,000) for thirty-two states whose population exceeded thirteen millions, is not too much as to quantity; it is too much because of the embarrassment which is caused by this diversity of monetary signs."—*La Question des Banques*, 404.

in coin. The situation in France differed from that in Germany and the United States in the respect that the notes of the departmental banks were made legal tender after the revolution of 1848 within the department where they were issued, but were forced into an inferior position by the notes of the Bank of France, which were legal tender throughout the republic. The circulation of the bank-notes of Germany and the United States without the legal tender quality might have been maintained at par with coin (from which they do not seem to have departed in Germany) under a system of closer union among the banks and prompter means of communication.

The government of Prussia took action as early as 1846 towards the centralization of the banking system, by the ordinance of October 5th, which provided that the provincial banks of the Kingdom should cease their operations when the Bank of Prussia should lose its special privileges. Another act, which indicated the purpose of the government to keep matters in its own hands, was the law of May 7, 1856, renewing the privileges of the Bank of Prussia, but reserving to the executive power the right at the end of 1871 and every ten years thereafter to dissolve the bank and return the capital to the shareholders. This provision necessarily exposed the other banks, under the ordinance of 1846, to dissolution as banks of issue at the end of the same period. The law remained in this condition until the reorganization of the North German Confederation under the headship of Prussia in 1867. A provision was then incorporated in the constitution of North Germany confiding to the Federal Assembly exclusively the regulation of banks of issue. The power remained in abeyance for a few years, when the law of March 27, 1870, reserved to the Confederation the right of granting the power of issue or of increasing the monetary circulation. The law stipulated that the renewal of the privilege of issue should not henceforth be granted except upon the condition that it might be revoked at any time upon preliminary notice of one year. It was also provided that where a bank possessed the right of issue for a definite

term, subject to preliminary notice of withdrawal, this notice should be regarded as having been given.

The monetary system of Germany called for radical reform, without regard to the banking policy adopted, in order to facilitate exchanges among the German states and with foreign countries. The coins were of such different denominations and degrees of abrasion that heavy exchange charges were levied on the borders of every little state and possible profits on merchandise were almost neutralized by this loss. Several conventions to simplify the monetary system were held before the unification of the Empire, one of the latest at Vienna on January 24, 1857. The basis of an agreement was then prepared abrogating the old systems and adopting one based upon the new pound of five hundred grams which was in use in several continental countries. Germany was divided by this convention into three zones. Silver was treated as the single standard of value and was to be coined into two forms,—the thaler, equivalent to a florin and three-quarters, and the florin, worth four-sevenths of a thaler. It was proposed to coin thirty thalers out of a pound of five hundred grams of fine silver for use in the Northern States and fifty-two and a half florins out of a pound for use in the South. Other silver pieces of one and two thalers were to be coined with special devices, under the name of the union thaler (*Vereinthaler*), for trade between North and South Germany, and were to be received by public depositories as lawful money.

Silver constituted the principal metallic stock of Germany and of the cash resources of the local banks up to the time of the monetary reform. Gold figured somewhat in the circulation, but it was not a legal tender.[1] The gold pieces, coined under the convention of 1857 according to mint re-

[1] Mr. Shaw declares that the convention in 1857 had a part of its motive in the wish by the German States "to protect that part of their currency system which was threatened by bimetallic law," and that France drew gold from Germany as well as from California and Australia as the result of the change in the ratio.—*History of Currency*, 205–11.

gulations, were to be received at a valuation in standard silver money known as "the bank rate," which was fixed in advance for six months and was never to be higher than the mean quotations in the market. The character of the circulating medium was further complicated by a circulation of government paper money, which was issued by every German state except the principality of Lippe and the three free cities of Hamburg, Bremen, and Lubeck. The adoption of the gold standard was first formally recommended by a commercial convention of one hundred and nineteen German cities which sat at Berlin between October 20, and October 23, 1868.[1] A resolution was presented by Dr. Adolph Soetbeer, who was the official reporter on the subject of the standard at an earlier session held in September, 1865, declaring that "a monetary unity, and at the same time such a general monetary reform as befits the age, can be brought about by the adoption simultaneously by all the German States of the single standard with full application of the decimal system, in pursuance of the principles recommended by the International Monetary Conference of Paris in its report of July 6, 1867." This resolution was adopted, including the recommendation of a unit of value equivalent to the gold five-franc piece, and the public authorities were recommended to put it in force not later than January 1, 1872, when the new system of weights and measures already adopted by the North German Confederation took effect.[2]

The payment of the great war indemnity by France gave Germany the opportunity to carry out the recommendations of her leading economists, that she adopt the gold standard. The direct payments in French gold were only 273,003,058 francs ($52,600,000), but the power given the German government to draw the proceeds of bills of exchange upon London and Paris gave them access in a large measure to the

[1] Appendix to American Report on International Monetary Conference of 1878, Sen. Ex. Doc. 58, 45th Congress, Third Ses., 727.

[2] M. Allard, the honorary director of the Belgian mint, declares that silver was "academically demonetized" by the vote of the Paris Conference.—*La Crise Agricole et Monétaire*, 41.

gold of the world. The German government kept an account with the London Joint-Stock Bank which was believed to run as high as £4,000,000 ($20,000,000)[1] and by watching the market were able to rapidly carry gold into Germany. The law establishing a uniform coinage (Act of December 4, 1871) did not adopt the five-franc piece as the unit, as recommended by the convention of 1868, but adopted a unit called the mark, equivalent to one-third of a Prussian thaler, and established the ratio of fifteen and a half to one between gold and silver. The provision of the treaty of Vienna, providing for the coinage of the union thaler of silver, was repealed. Gold legal tender coins were provided for, but the Imperial gold standard was not fully established until the coinage act of July 9, 1873, when it superseded all local standar[illegible] and made the monetary unit the mark of gold.[2] The Imperial silver coinage was to be carried on on government account, and limited to ten marks per capita, and was to be a legal tender for only twenty marks between individuals, but payable in any sum to the government. The new silver coins were made mere token coins, by reducing the weight of the fine silver eleven and one-ninth per cent. below the full weight at the ratio of fifteen and a half to one and coining a pound of fine silver into one hundred marks and a pound of fine gold into 1395 marks.

One of the interesting incidental results of the new coinage laws was the termination of the career of the old Bank of Hamburg, which had for more than two and a half centuries been carried on on the principles of the Bank of Venice and the Bank of Amsterdam. The accounts of the bank were kept in marks banco, representing a bank credit of the uniform value of half a thaler (37½ cents), and its notes were redeemable in silver. The Bank of Hamburg, founded in 1619, was the last survivor of the medieval banks, created

[1] Bagehot, *Lombard Street*, Works, V., 199-202.

[2] The exact equivalent of the mark in American gold coin is twenty-three and eight-tenths cents, but for convenience of computation in dealing with large figures it is treated in this work as substantially equal to a quarter of a dollar.

for the purposes of foreign commerce. Accounts could be opened only by a Hamburg citizen or corporation and were transferred only upon his appearance in person or by attorney with a transfer order. The principle upon which the bank was conducted was the granting of a credit on the books for the silver or gold deposited. No loans were made and no notes or other liabilities were created beyond the amount of coin and bullion on deposit. So faithfully was this rule adhered to that when the French on November 5, 1813, took possession of the bank they found 7,506,956 marks in silver held against liabilities of 7,489,343 marks. They removed a large part of the treasure before the freedom of Hamburg was re-established on June 1, 1814, but the bank resumed business with unimpaired credit and the thefts of Napoleon's forces were made good in 1816 by a transfer of French securities. Modern banking methods were gradually introduced into the Bank of Hamburg and a capital was accumulated of about 1,000,000 marks ($250,000) in addition to the buildings. The bank survived the storm of the crisis of 1857, only to fall under the decrees establishing the new German monetary system, which ordered the bank to liquidate its accounts in fine silver by February 15, 1873. The latest reference to its existence is found in the proceedings of the Hamburg Senate on October 13, 1875, declaring their purpose to sell to the Bank of Germany for 900,000 marks the buildings of "the venerable institution which had performed such great services to German trade."[1]

The accumulation of a stock of gold was begun by the Imperial Bank and the government, and the purchases of gold by the bank, from January 1, 1876, to the end of 1893, amounted in American money to $434,890,067. The coinage of Imperial gold coins from 1872 to the close of 1893 reached 2,737,790,915 marks and the aggregate coinage of silver 484,048,609 marks. The sales of silver by the government up to March 31, 1893, represented a coining value of 672,862,729 marks, but the amount actually received was

[1] Palgrave, *Dictionary of Political Economy*, I., 105.

574,055,532 marks, showing a loss of 98,807,197 marks.[1] The bulk of the sales were made before May 16, 1878, before the great decline in the price of silver, and the highest price per kilogram was obtained in the period of the largest sales, between September 30, 1876, and September 30, 1877.[2] The profit on the gold, silver, and subsidiary coinage, taking these coins at their face value, was 96,380,330 marks, and the cost of recoinage added to the loss on silver was 127,894,218 marks, showing a net loss of 31,513,888 marks.

The banking system of the Empire was unified in a measure by the provisions of the law of July 9, 1873, that bank bills should be withdrawn from circulation before January 1, 1876, if their value was not declared in Imperial marks, and that the smallest notes should be for 100 marks ($23.80). The work of unification was completed, so far as it was possible to complete it, by the Imperial law of March 14, 1875, which was supplemented by the Prussian law of March 27th and a convention between Prussia and the Empire on May 17th and 18th following. The Royal Bank of Prussia was directed to cease its operations on December 31, 1875, and to transfer its rights and privileges to a new bank, known as the Bank of the Empire (*Reichsbank*). The government of Prussia was allowed to withdraw its capital of 1,906,800 thalers in the old institution and the half of the reserve fund belonging to it. The Prussian government was further compensated for the surrender of its rights in the bank by an indemnity of 15,000,000 marks ($3,750,000), paid from the Treasury of the Empire, and a pledge that

[1] The equivalent for these sums in American money, as given in the American translation of the Report of the Berlin Silver Commission of 1894, are: Gold coinage, $651,594,221; silver coinage, $115,203,549; face value of silver coins sold, $160,141,329; price received, $136,625,216; loss on sales, $23,516,113; net loss after deducting profits, $7,500,308.—Sen. Mis. Doc. 274, pt. I., Fifty-third Congress, Second Session, 33–36.

[2] The sales during this period were not far short of half of the whole, being 1680.4 kilograms and representing a face value of 302,500,000 marks. The average price of silver in 1876 was $1.156 per ounce and in 1877, $1.201 per ounce.

the new bank should continue the annual payment of 621,910 thalers ($465,000) from 1876 to 1925 which had been agreed upon by the Bank of Prussia in 1856.[1] The Imperial government agreed to be responsible for this annuity in case the privileges of the bank were not continued. The shareholders of the Bank of Prussia were given the option of receiving back their capital in cash, in accordance with the pledge of the Prussian law of October 5, 1846, or receiving shares of equal face value with their existing holdings in the new Imperial Bank. The new bank on these conditions succeeded to all the rights and obligations of the Bank of Prussia. The Chancellor of the Empire was authorized to acquire the bank shares which should be exchanged for the shares of the Bank of Prussia and to issue interest-bearing Treasury bonds maturing not later than May 1, 1876, to the amount of the shares not issued, in order to complete the capital of the new institution. The capital was fixed by law at 120,000,000 marks and was divided into 40,000 shares of 3000 marks ($750) each, of which 19,919 shares replaced the shares of the Bank of Prussia which the holders had chosen to convert; 20,000 shares were placed by public subscription, and 81 by means of sales on the Bourse.

The organization of the Imperial Bank made it entirely a private institution as to ownership, but essentially a public one in its management. "In fact," says M. Octave Noel, "the establishment is closely bound to the state and is only able to move, think or act when the state manifests in some manner its presence and affirms its control." The official control over the bank is confided to a council of curators, composed of the Chancellor of the Empire, who is President, and four other members, one named by the Emperor and the other three by the Federal Council. The direction of the policy of the bank is so completely under the orders of the Chancellor that in case of his absence or impeachment the presidency of the Council is vested temporarily in an official named by the Emperor. The Chancellor or his substitute

[1] Noel, I., 248.

directs the entire administration and issues the instructions to the council of direction, to the branches and to the employees of the bank. The committee of curators meet every three months and examine reports regarding the bank's condition and the operations which are being carried on. The administrative authority is vested in a directorate composed of a president and a number of members named for life by the Imperial government upon the nomination of the Federal Council. The official force of the bank, although paid from the funds of the institution, are subject to the same obligations and enjoy the same privileges as the public employees of the Empire. Honors and pensions are accorded them, benefits are voted to the families of deceased employees, the number of posts and the salaries are included in the Imperial budget, and the accounts are subject to the control of the accounting officers of the Empire. The employees of the bank, moreover, are forbidden by law to hold stock in the institution.

The influence of the private owners is exerted through a central commission of fifteen members and fifteen alternates, elected by the general assembly of the shareholders from their own numbers. These commissioners are required to possess in their own right not less than three shares, to have their domicile within the Empire, and nine members and nine alternates are required to be residents of Berlin. A third of the board is elected every year and the members are eligible for re-election. Many of the business details of the management of the bank are remitted to this central commission, so long as their course does not meet the disapproval of the Imperial authorities. They are required to examine at least each month the weekly reports, to inspect the deposit accounts, and to determine what proportion of the bank funds shall be used in advances and in the purchase of paper, what the rate of discount shall be, and what arrangements shall be made with other German banks. A still smaller body of three members of the central commission is charged with the daily supervision of the bank's af-

fairs and they are authorized to sit at all meetings of the directorate with consulting powers.

The note circulation of the Imperial Bank is based largely upon the English banking act of 1844, but with an important modification which adds greatly to the ability of the bank to provide accommodation in times of stringency. There is a fixed limit of authorized circulation, against which cash or its equivalent must be held in the proportion of one-third, and issues beyond this limit must be covered in cash for the full amount. The cash reserve of one-third in the one case and one hundred per cent. in the other may consist of money having currency in Germany, Imperial Treasury bonds, gold bullion, or foreign gold coin. The notes, therefore, are issued against the general assets of the bank, which remain wholly within its own control and are not set aside by specific designation or prior lien for the security of the note holders. The law, says Prof. Dunbar, "has simply provided by suitable measures that the affairs of the bank, including its issue of notes and the money and securities held by it, shall meet certain tests of soundness, believing that both the ultimate solvency of the bank and the prompt payment of its circulation are thus made secure."[1] The limit of authorized circulation was fixed by the law of March 14, 1875, at 250,000,000 marks ($60,000,000) but the same law provided that when any existing bank of circulation should surrender its right, either by liquidation or by refusal to accept the conditions imposed by the new law, the amount of the circulation might be assumed by the Imperial Bank. Seventeen banks surrendered their right to issue notes soon after the adoption of the new system and their action added 26,085,000 marks to the authorized circulation of the Imperial Bank. This was afterwards increased to 42,117,000 marks.[2] The two-thirds of the authorized circulation not covered by the cash reserve are required to be covered by

[1] *Theory and History of Banking*, 195.

[2] Raffalovich, *Marché Financier en 1893-4*, 67.

bills of exchange maturing in not more than three months and bearing not less than two solvent names.

The novel feature of the German system of circulation is the authority given to the Imperial Bank to exceed the statutory limit of note issue without metallic security, upon the payment of a tax at the rate of five per cent. per year upon the excess of circulation. Weekly reports are required by the government and upon the excess of circulation shown above the limit a tax of $\frac{5}{48}$ per cent. is at once assessed, representing approximately the tax for a single week at the rate of five per cent. a year. This provision permits increased issues when there is stringency enough in the money market to carry current discount rates above five per cent. but drives the new notes promptly out of circulation when the discount rate falls. The operation of the rule, which has been several times availed of by the Imperial Bank and by other German banks, has proved salutary in averting such stringency as has been felt in England under the Act of 1844, while it has kept the circulation within the limits set by the needs of business.[1]

The local banks of Germany were brought by the law of 1875 under the same rules as the Imperial Bank and drastic regulations were enforced to compel them to comply with the new law or abandon the issue of circulating notes. The purpose of the new legislation, to bring the control of the bank-note circulation as soon as practicable into the hands of the Imperial Bank, was indicated by the declaration that the power to issue bank-notes or to increase circulation beyond the limit already authorized by the various states should be granted only by a law of the Empire. Prussia was almost supreme in the Federal Council and there was little likelihood that she would consent to any law increasing the circulation of the local banks. The long duration of the privilege accorded to some of them was cut off by a provision that their privileges should be subject to revocation on January 1, 1891,

[1] The example of Germany was followed in this provision by Austria-Hungary and Japan in the revision of their bank charters.

and every tenth year thereafter, upon one year's notice and without indemnity, if they accepted the power of note issue involved in the new law. Those banks which were not disposed to accept the new conditions were dealt with in a manner similar to the departmental banks of France after the revolution of 1848. They were not deprived of the privilege of issuing notes, but they were forbidden by Article 42 of the law to carry on banking operations, outside the limits of the state which had given them the privilege, by means of branches or agents or to hold shares in other banks. Another provision (Article 43) declared that "The notes of banks having the privilege of note issue at the time of the promulgation of this law, shall not be employed in payments outside the state which may have granted them the privilege. The exchange of these notes, however, for other bank-notes, paper money, or specie is not subject to this prohibition."

Banks which saw fit to submit to the new conditions were treated somewhat more favorably, pending the extension of the branches of the Imperial Bank throughout the Empire. They were governed by Article 44 of the law and were subject to the same conditions, as to the classes of securities dealt in, the character of the commercial paper held, the proportion of cash reserve to circulation and the payment of benefits to the state, as the Imperial Bank. They were required to hold security for their circulation to the amount of one-third in money having currency in Germany, in Imperial Treasury bonds, in gold bullion or foreign gold coin. The remaining two-thirds of the circulation was required to be protected by bills of exchange running for not more than three months and bearing three endorsements or not less than two names of well-known solvency. They were required to exchange their notes for German money having currency at Berlin, or Frankfort, and redemption must not be delayed beyond the morrow of the presentation of the note.[1] Banks accepting these conditions obligated themselves to receive at their face value, in branches established in cities of more

[1] Noel, I., 320–23.

than eighty thousand inhabitants and at the parent bank the notes of German banks whose circulation was authorized throughout the Empire and which were redeemable in coin on demand. Bills on one bank thus received by another could be used only in the settlement of balances with the bank of issue, employed in payments within the territory of the issuing bank or presented for redemption. Banks desiring to conform to the requirements of Article 44 were required to present to the Chancellor of the Empire the evidence that their statutes conformed to the law and that the locality chosen for the exchange of bills (Berlin or Frankfort) possessed a branch ready for actual operation.

Much feeling was aroused among the German banks upon the passage of this law and fifteen of the thirty-two outside the Bank of Prussia promptly abandoned their right to circulation, and became mere private banks of discount and deposit, rather than conform to all the requirements of the new law. The Bank of Brunswick took the bolder course, which it was believed no bank would be able to maintain, of refusing to comply with Article 44 and continuing its circulation under the limitations of Articles 42 and 43. The Bank of Brunswick, therefore, continued to issue bills which circulated within the limits of the duchy and braved the efforts of the Bank of Prussia to force it into submission. The Prussian Bank refused to receive the paper of the Bank of Brunswick and upon the failure of this device had orders issued to the postal savings banks not to receive the notes of the bank on deposit. The latter measure threatened to arouse so much of the old separatist feeling in Germany that it was abandoned by direction of the Chancellor. Frederick William of Brunswick died during the latter part of 1884, and Prince Albert of Prussia, the nephew of the German Emperor, was elected Duke of Brunswick by the Diet on October 21, 1885. The close relations thus established between Brunswick and the Imperial government soon led to the compliance of the Bank of Brunswick with the provisions of Article 44.

The purpose to clear the field for the circulation of the Im-

perial Bank was indicated by a law of April 30, 1874, which required the retirement of the paper money issued by the various states not later than July 1, 1875. The Imperial government, in order to promote this policy, was authorized to issue Treasury bonds to the amount of 120,000,000 marks ($30,000,000) and to apportion them among the states according to population. The paper money in circulation was 61,374,599 thalers ($45,000,000), and it was not distributed in any such even ratio as the new bonds. The law, in contemplation of this situation, authorized the Imperial Treasury to advance to states which needed an additional allowance to retire their paper money a sum in Treasury bonds equal to two-thirds of the excess of notes above the original apportionment of bonds. These bonds were to be receivable by the Imperial Treasury and were to be convertible on demand into metallic money. The advances of bonds in addition to the apportionment of 120,000,000 marks, were 54,919,941 marks, of which Saxony received 19,013,441 marks; Bavaria, 14,534,975 marks; Baden, 4,577,449 marks; Wurtemberg, 3,309,651 marks; Hesse, 3,250,514 marks; and the other states less than 2,000,000 marks each. Prussia received no additional advance, but her share of the original allotment was 72,145,494 marks. Oldenburg, Lippe, Lubeck, Bremen, Hamburg, and Alsace-Lorraine received no extra advance.

The sixteen banks which decided in 1875 to accept the federal regulation of their circulation and to continue to issue notes were, besides the Imperial Bank and the Bank of Brunswick, the Municipal Bank of Breslau, and the banks of Magdeburg, Dantzig, the Grand Duchy of Posen, Hanover, Frankfort, Bavaria, Saxony, United Deposits at Leipzig, Chemnitz, Wurtemberg, Baden, Southern Germany, and Bremen. Provision was made in the new law for a new bank in Bavaria, with which two existing banks were consolidated, and which was given special permission to issue circulating notes to the amount of 70,000,000 marks. The authorized uncovered circulation of these sixteen banks was 111,125,000 marks, of which the Bank of Bavaria was

originally entitled to 32,000,000 marks, the Bank of Saxony at Dresden to 16,771,000 marks, the banks of Frankfort, Baden, Wurtemberg, and of Southern Germany to 10,000,000 marks each, and the others to smaller amounts. The absorption of the issues of these banks by the Imperial Bank has proceeded rapidly in recent years. Only eight banks of circulation remained in existence in Germany at the close of 1891, outside the Imperial Bank. They included the larger of the banks named above, and their aggregate capital was 130,000,000 marks ($32,000,000). The circulation of the local banks fell from 200,300,000 marks ($50,000,000) in 1883 to 192,400,000 marks in 1890, but their metallic reserve increased from 111,200,000 marks to 112,600,000 marks.[1] Four more banks surrendered the right of note issue within the next sixteen years, and at the beginning of 1908 only the following institutions remained as competitors in this field with the Imperial Bank: Bank of Bavaria, with an authorized issue of 32,000,000 marks; Bank of Saxony, 16,771,000 marks; Bank of Baden, 10,000,000 marks; Bank of Wurtemberg, 10,000,000 marks.

The principal items in the accounts of the Imperial Bank since its creation are shown in the following table[2]:

THE IMPERIAL BANK OF GERMANY

YEAR.	MEAN CIRCULATION.	MEAN METALLIC RESERVE.	MEAN DISCOUNTS.	MEAN ADVANCES.	DEPOSITS, CURRENT ACCOUNTS, ETC.
		(In millions of marks.)			
1876	684.8	510.5	402.9	50.9	218.7
1878	622.6	494.0	340.8	52.4	184.6
1880	735.0	562.0	345.7	51.3	185.4
1882	747.0	548.9	372.1	54.4	171.6
1884	732.9	591.7	377.7	49.1	222.9
1885	727.4	586.1	372.7	52.4	235.6
1888	933.0	903.4	430.8	52.0	381.8
1890	983.8	801.0	543.1	98.0	361.4
1892	984.7	942.0	541.7	95.0	511.8
1894	1,000.0	934.3	547.4	81.0	492.3

[1] *Bulletin de Statistique*, Nov., 1891, XXX., 542.

[2] These figures down to 1900 are taken from *Die Reichsbank, 1876–1900*, 268, seq.

THE IMPERIAL BANK OF GERMANY—(*Continued.*)

YEAR.	MEAN CIRCULATION.	MEAN METALLIC RESERVE.	MEAN DISCOUNTS.	MEAN ADVANCES.	DEPOSITS, CURRENT ACCOUNTS, ETC.
		(In millions of marks.)			
1895	1,095.5	1,011.7	573.9	83.2	499.5
1896	1,083.4	891.9	646.3	106.0	484.2
1898	1,124.5	850.9	713.8	96.4	474.6
1900	1,138.5	817.1	800.1	80.0	512.7
1901	1,190.2	911.4	845.3	72.8	596.5
1902	1,229.6	982.2	775.5	74.1	576.5
1903	1,248.7	904.9	845.7	74.8	553.6
1904	1,288.4	926.6	823.3	74.2	534.6
1905	1,335.6	972.9	875.7	72.0	585.2
1906	1,387.0	890.9	989.4	83.6	575.6
1907	1,478.7	843.3	1,104.0	98.0	577.9
1908[1]	1,792.6	1,031.8	1,127.0	164.0	615.1

The first issues of the Imperial Bank subject to the five per cent. tax occurred in December, 1881, and were repeated in September and October, 1882; in December, 1886; and three times in the latter part of 1889, when the excess above the limit ran as high as 109,477,500 marks ($26,000,000). The limit was exceeded in 1890 by 26,250,000 marks ($6,500,000), but at the end of 1891 the reserve had been so increased that the note issues were 101,407,000 marks below the limit. This margin was reduced to 16,764,000 marks ($4,000,000) at the end of 1892, but there was only one week of excess issues in 1893, none in 1894, and three weeks in 1895.

New conditions began to develop with the expansion of German trade in 1896. The number of weeks in which taxes were paid in that year was six; in 1897, nine; in 1898, sixteen; in 1899, twenty; and in 1900, twenty. The amount paid in taxes on this excess circulation, which had never been higher than 338,627 marks ($81,000) before 1896, attained 464,801 marks in that year; 767,916 marks in 1897; 1,927,401 marks in 1898; 2,847,294 marks in 1899; and 2,517,853 marks in 1900, making total payments in five years of 8,525,265 marks ($2,025,000). The reason for this was not found in any special pressure in the market for

[1] June 30.

capital, except perhaps in 1900, but in the fact that the growth of business in Germany required a larger volume of circulating medium.

In the revision of the charter of the bank by the law of June 7, 1899, the new conditions were recognized. The government proposed an increase in the authorized uncovered circulation to 400,000,000 marks, and this limit was raised by the Reichstag to 450,000,000 marks ($107,000,000). Soon after these limits became effective, on January 1, 1901, the Frankfort Bank (in March, 1901) and the Bank of South Germany (in June, 1902) surrendered their fixed issues of 10,000,000 each to the Imperial Bank, and in 1906 a third institution, raising its total authorized or "uncovered" issue to 472,829,000 marks ($112,500,000).

The object of this elevation of the limit of authorized circulation was to avoid imposing an unwarranted burden of taxation upon the circulation when it was only at the amount required by normal conditions. The effect was reflected in the statement of excess issues as soon as the new limit took effect, which was at the beginning of 1901. The limit of untaxed circulation was exceeded during only five weeks in that year; three weeks in 1902; seven weeks in 1903; eight weeks in 1904; nine weeks in 1905; and seventeen weeks in 1906. The amount of tax paid was only 352,684 marks ($83,800) in 1901, and prior to the pressure of 1907 reached a maximum under the new order of things of 3,692,350 marks ($880,000) in 1906.

The highest amount attained by the excess circulation prior to the operation of the new limit was 371,233,061 marks in the week ending September 30, 1899. It was this September week of the autumn crop movement and the close of the financial quarter which almost invariably showed the largest issues. Even the outbreak of the war between Russia and Japan in 1904, which caused a temporary panic on the bourses of Berlin and Paris, did not compel the issue of any taxed circulation until the quarter-end on March 31st, when the amount was 166,126,902 marks, while the limit reached on September 30th, after the peace, was 305,038,527 marks,

and the maximum of 1905 on the same date was 450,282,987 marks ($107,000,000).[1]

The crisis of 1907, however, subjected the Imperial Bank to a severe test, for the pressure felt in Germany was not merely a reflex of that in the United States, but was due also to speculation and excessive demands for capital at home. Not only was the discount rate of the bank kept at seven and a half per cent. from November 8, 1907, to January 15, 1908, but remained at six per cent. until March 7th, and at five per cent. far into the summer, after the Bank of England rate had fallen to two and a half per cent. Even these high rates barely kept the gold reserve intact, and caused doubts to spread of the wisdom of the law imposing the tax of five per cent. on the uncovered circulation above the legal limit. The annual report for 1907 showed that the average metallic reserve of the year had shrunk to 843,340,000 marks ($200,300,000) as compared with 890,965,000 marks in 1906 and 972,959,000 marks in 1905. Even this degree of security had been maintained only at heavy cost. The average discount rate of 1907 had been 6.033 per cent.; circulation subject to the special tax had been outstanding twenty-five weeks, or for practically half the year; the week of December 31st witnessed an excess circulation of 625,974,363 marks ($149,000,000); and the tax paid for the year amounted to 5,600,698 marks ($1,350,000).[2]

If the burden had fallen chiefly upon the bank, it would have been viewed with equanimity by many elements in the community, but the tax imposed upon commerce was so heavy that severe criticisms of the bank and the government were heard in the Reichstag, which went so far as to demand a modification of the gold standard and the payment of silver for notes in order "to put a silver wall around the gold

[1] Raffalovich, *Le Marché Financier en 1905-1906*, 428.

[2] *Bulletin de Statistique*, April, 1908, LXIII., 476. It was hinted by the Russian Minister of Finance that the German bank was compelled to appeal to Russia for a loan of gold.—*London Statist*, January 11, 1908, LXI., 76.

treasure."[1] While the new governor of the bank, Herr Havenstein,[2] declared it to be his unalterable purpose to maintain the gold standard, the government felt compelled to take several measures to allay the growing uneasiness. One of these was the appointment of a commission, chosen from among economists and representatives of the commercial classes, to examine into questions relating to the extension of the bank charter, the increase of the limit of untaxed issues, the extension of the check and clearing system, and the methods of drawing gold into the bank from abroad and from the domestic circulation.[3] Other measures were the enactment of a code governing the use of checks and the increase of the *per capita* stock of subsidiary silver. Already the bank, under the sanction of a law of February 20, 1906, had begun the issue of notes for fifty marks ($11.90) and twenty marks ($4.76), in order to draw into the vaults of the bank an equivalent amount of gold.[4] Of these new notes 139,286,100 marks of the larger denomination and 151,157,180 marks of the smaller were already in circulation at the close of 1907.[5]

The rate of discount charged by the Bank of Germany, including its earlier career as the Bank of Prussia, averaged barely over four and a quarter per cent. from 1845 to 1900. The highest average for a decade was 4.60 per cent., from 1865 to 1874, — the period of the wars with Austria and France, — and the lowest was 3.65 per cent., from 1885 to 1894. These averages, however, do not represent the extreme fluctuations. The rate of nine per cent. prevailed

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[1] *Économiste Européen*, Jan. 17, 1908, XXXIII., 69.

[2] The new governor in January, 1908, succeeded Dr. Koch who, after passing through various grades in the old Bank of Prussia and the Imperial Bank, had been governor of the latter since 1890.— *London Statist.*, December 14, 1907, LX.

[3] *London Economist*, January 18, 1908, LXVI., 122. The first sitting of the commission was on May 1, 1908. — *Moniteur des Intérêts Matériels*, May 5, 1908, 1492.

[4] *Bulletin de Statistique*, February, 1906, LIX., 178.

[5] *Ibid.*, April, 1908, LXIII., 178.

for sixty-three days in 1866, and eight per cent. for five days in 1866, and thirty-two days in 1870.[1] Apart from these instances, there was no higher rate than seven per cent. after 1866, until the crisis of 1907. The German rate during the fifty-six years ending with 1900 was higher on the average by about two-thirds of one per cent. than the rate of the Bank of England; but this is partly accounted for by the fact that the rate at Berlin was never below three per cent., while for about one-third of the time the rate at London was two or two and a half per cent.[2]

Discount rates were high at the Imperial Bank during the entire three years beginning with 1905. The constant demand for capital throughout the world, and the severe pressure exerted on European markets by high rates in New York in the autumn of 1905 and again in 1906, compelled all the European banks to take unusual precautions to guard their reserves. The average rates at the Imperial Bank were 4.10 per cent. in 1901; 3.12 per cent. in 1902; 3.84 per cent. in 1903; 4.22 per cent. in 1904; 3.82 per cent. in 1905; and 5.15 per cent. in 1906. The rate was changed eight times in 1905 and the year closed with a six per cent. rate, which never fell below four and a half per cent. in 1906.

On December 18, 1906, the rate was raised to seven per cent. for the first time since the Boer War and did not fall below five and a half per cent. at any time during the next year. This was the rate prevailing when the crisis in the United States led to a rate of six and a half per cent. on October 29th, and finally to a special meeting of the Central Committee which fixed the rate at seven and a half per cent. on November 8, 1907.

The discount business of the bank is largely that of rediscount for the large joint stock banks, which have come to play an important part not only in commercial banking, but in flotations of securities and corporation financing.[3] By

[1] *Cf.* Palgrave, *Bank Rate and the Money Market*, 157.

[2] *Ibid.*, 204.

[3] The three largest of these institutions are the Deutsche Bank, with aggregate resources at the close of 1907 of 1,871,720,000 marks

reason of the fact that much paper is offered for rediscount only some time after it is drawn, the average maturities held at the Imperial Bank are well within the legal limit of three months. The average maturity of all domestic bills, which in 1876 was twenty-seven days and in 1898 twenty-five days, was in 1906 only twenty days. The average amount of these bills was 1480 marks ($352) in 1876, and 1689 marks ($402) in 1906. Of bills outstanding at the close of the year, the proportion maturing in fifteen days or less in 1906 was 42 per cent.; those having thirty-one to sixty days to run, 27 per cent.; and those having from sixty-one to ninety days only 15 per cent.[1]

The proportion of the metallic reserve kept in gold was not regularly stated until the revision of the charter by the law of 1909. The amount at the close of 1894 was 714,448,000 marks ($170,000,000). The competition for the yellow metal and the great expansion of trade in Germany prevented any permanent gain in gold during the next decade and reduced the average amount held during 1906 to 674,734,000 marks and during 1907 to 633,830,000 marks. Among the devices adopted to facilitate the importation of gold was that of exempting advances upon imports of the metal from interest charges for a stipulated period, which was extended in March, 1908, to a maximum of six weeks.[2]

The redemption of notes in coin on demand is required at the Imperial Bank in Berlin, but may be refused at the branches when the funds on hand do not justify it.[3] The

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($456,000,000); the Diskonto Gesellschaft, 850,000,000 marks ($202,000,000); and the Dresdner Bank, 1,012,060,000 marks ($240,000,000). *Cf.* the author's *Principles of Money and Banking*, II., 283,

[1] *London Bankers' Magazine*, December, 1907, LXXXIV, 700.

[2] *Moniteur des Intérêts Matériels*, March 29, 1908, 979.

[3] The report, long prevalent, that the Imperial Bank discriminated against those seeking to withdraw gold, was denied by Dr. Koch, governor of the bank, in the autumn of 1907, who said that the bank "pays out gold in unlimited amounts at its central office in Berlin in redemption of its notes; but that it does not do this at branches like those of Hamburg and Bremen, since, in that case, it would have to

bank is obliged to receive the bills of other banks of issue which have conformed to the law of March 24, 1875, and where they are established in cities of more than 80,000 inhabitants. Bank bills were not a legal tender until 1909, and the original charter prescribed that "there exists no obligation to accept bank bills for payments which are legally due in specie, and no such obligation can be established by the legislation of any state with regard to the banks of the state."

The government took advantage of the extension of the charter of the Imperial Bank in 1889 to secure a larger share in the dividends than it had before demanded. The statute of December 18, 1889, reduced from four and a half to three and a half per cent. the dividend allotted to the shareholders before any other allotment. Twenty per cent. of the remaining profits was to be carried to a reserve fund, so long as this fund was less than a quarter of the capital, and the remainder was to be shared equally between the shareholders and the Imperial Treasury until the portion of the shareholders reached six per cent. Of the profits in excess of six per cent. the shareholders obtained only a quarter and the Imperial Treasury the other three-quarters. The minimum dividend of three and a half per cent. was to be made up to the shareholders from the reserve funds when it was not provided by the annual profits of the bank. The reserve fund reached the legal limit of one-fourth of the capital in 1891. The old law divided the dividends above four and a half per cent. equally between the shareholders and the government up to eight per cent. The actual profits under the old law from 1876 to 1888 were 131,900,000 marks, amounting to 8.46 per cent. annually on the capital. The shareholders received 94,900,000 marks, amounting to 6.08 per cent. of the capital and the state received 24,700,000 marks.

Further changes were made in favor of the government by the revisions of 1899 and 1909. Under both laws, the shareholders were still allotted three and one-half per cent. in

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bear the expense of shipment to those cities."—Letter in *London Economist*, November 9, 1907, LXV., 1925.

dividends before the distribution to the state, and after an allotment to the reserve fund three-quarters of the remaining profits went into the public treasury and only the remaining one-quarter to the shareholders. The difference between the law of 1899 and that of 1909 was that under the former, 20 per cent. of surplus profits after the first dividend to shareholders was carried to the reserve fund, until this fund should attain 60,000,000 marks, while under the law of 1909, only 10 per cent. of the excess profits was to be carried to the reserve fund. The number of shareholders increased from 7,877 at the close of 1894 to 18,799 at the close of 1913. The number of offices of the bank on December 31, 1894, was 267, and on December 31, 1913, 487.

One of the important services rendered to German commerce by the Imperial Bank, which takes the place in some degree of the clearing and cheque system, is the transfer of deposits on current account (*Giro Verkehr*). By this system a person in any town where there is a branch of the bank, wishing to make a payment to some one in another town, may pay the amount into the local branch of the Imperial Bank and it will be credited on the following day to the current account of the person in whose favor it is deposited. These transfers are made without charge and it is not necessary that the person making the payment shall have an account at the bank. The system was devised partly to facilitate transactions in different parts of the Empire and

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[1] The lion's share going to the government under these provisions, in case of high discount rates and large profits, is illustrated by the accounts for 1907. Net profits stood at 52,313,651 marks, against 40,262,908 marks in 1906. The three and a half per cent. dividend to shareholders called for 6,300,000 marks, and the division of the remainder according to law gave 34,510,238 marks to the state and only 11,503,413 marks to shareholders. Even under these conditions their dividend was at the rate of 9.89 per cent. as compared with 8.22 per cent. in 1906. If the tax on excess circulation is taken into account, the government received 40,110,936 marks ($9,450,000) against 29,164,530 marks in 1906.—*Bulletin de Statistique*, April, 1908, LXIII., 478.

partly to economize the use of specie. In the latter respect it has been eminently successful, the proportion paid in specie having declined from 39.5 per cent. in 1876 to 16.8 per cent. in 1900.

In two other respects the Imperial Bank has conformed in recent years to modern methods of giving flexibility to its resources and strengthening its control over the money market. One of these is the accumulation of foreign bills, particularly those drawn on England, in its portfolio. President Koch, discussing this policy early in December, 1906, declared that it was the practice of the bank to buy these bills at times when they were low and to sell them later, when, in consequence of the higher rate of exchange, there might otherwise be danger of gold exports.[1] The other measure is that known in England as "borrowing from the market." This process consists in offering Treasury bills for re-discount in the open market, thereby absorbing surplus cash and preventing a too rapid fall in the open market rate.[2]

The law of June 1, 1909, did not alter the amount of the capital of the bank, which had been increased in 1889 to 180,000,000 marks ($43,000,000). Several important changes were made, however, in respect to the note issue. The total amount of uncovered notes which the Imperial Bank was authorized to issue free of tax was increased to 550,000,000 marks ($130,750,000), and the total note circulation for all banks of issue was fixed at 618,000,000 marks. A new provision was made for the Imperial Bank, however, by which the amount of uncovered notes free of tax was permitted to rise to 750,000,000 marks for the weekly periods at the end of March, June, September, and December of each year. This provision was made to meet the special demand for currency occasioned by the custom which prevails in

[1] *London Economist*, December 8, 1906, LXIII., 2006.

[2] This was done in February, 1908, when 40,000,000 marks in Treasury bills were thus offered and President Havenstein declared that the fall in the open market-rate did not represent the real state of the market.—Berlin letter in *New York Evening Post*, February 29, 1908.

Germany of the quarterly settlement of commercial accounts.

Another important change was the making of the notes of the Imperial Bank legal tender. It was stated in the report presented with the bill to the Reichstag that, as bank-notes were regularly employed, and for large amounts almost exclusively, it was advisable to fix their legal status in order to avoid difficulties when they were tendered as legal payment.[1] At the same time, the notes were made redeemable exclusively in German gold coin, instead of merely in German currency, which included government notes and silver. A further obligation was imposed upon the Imperial Bank to accept at par the notes of the state banks of issue, at its main office in Berlin, and at branch offices in the larger cities.

The characteristic feature of the policy of the Imperial Bank during recent years has been the building up of a gold reserve which should be adequate to the strain of the political anxieties which prevailed in Europe during and after the struggle in the Balkans. By bidding high for the precious metal whenever it appeared in free markets and by maintaining the discount rate at six per cent. for nearly ten months (from January 1st to October 27th), affording an average rate for 1913 of 5.885 per cent., the bank increased its metallic reserves from 1,081,711,000 marks ($257,000,000) on January 7, 1913, to 1,540,135,000 marks ($366,000,000) on November 22, 1913. The average gold holdings, which were 880,083,000 marks ($209,400,000) for 1912, rose to 1,067,596,000 marks ($254,000,000) for 1913, and the process of gold accumulation was continued well into the following year. This increase in the gold stock was accomplished in part by the substitution of small notes for gold drawn from the circulation. The outstanding issues of notes of 50 marks ($11.90) and of 20 marks ($4.76) were increased from 367,008,770 marks on December 31, 1911, to 681,822,040 marks on December 31, 1913, or by a total of 314,813,730 marks ($74,800,000).

[1] "Renewal of Reichsbank Charter," National Monetary Commission, Senate Document 507, 61st Congress, Second Session, p. 98.

CHAPTER IX.

THE AUSTRO-HUNGARIAN BANK.

The Evils of a Century of Paper Money—The First Issues of Notes and the Efforts to Restore Coin Redemption—The Creation of the Imperial Bank and the Successive Changes in its Charter—Establishment and Growth of the Hungarian Branch—The Monetary Reform of 1892 and the New Rate of Exchange—Use of Modern Devices for Maintaining Stability of Exchange.

THE Austrian Empire has been for a century under the dominion of paper money, but her monetary history has differed from that of France with the *assignats* and the United States with the Continental money of the Revolution. The Austrian paper money has been a serious detriment to the commercial development of the country and the solidity of business enterprises, but the volume has never reached the point of absolute worthlessness and repudiation. The effect of the system has been, in the language of Professor Sumner,[1] "not like an acute disease; it is like an invalid state with occasional fever." The first issues of paper money seem to have had the same beneficial effects as the issues of Law's bank in France and the issues of £1 bank-notes in Scotland, in stimulating business enterprises and affording a convenient circulating medium where none existed, but the limit was soon over-passed and the Austrian paper money began its downward course. This course has been several times arrested by earnest efforts on the part of the government, only to be resumed when the necessities of war compelled new issues of paper. The fi-

[1] *History of American Currency*, p. 323.

nancial history of the Austrian Empire has been a succession of acts for refunding, for new issues of interest-bearing and non-interest bearing securities, and new regulations for the Austrian National Bank until the recital becomes almost tedious. The government and the bank have been able in recent years to accumulate a large stock of gold, the paper money has risen much above the value of standard silver coins, and unless the country is dragged into some new war she will soon accomplish the resumption of specie payments upon a gold basis.

The first important banking institution in Austria seems to have been created at Vienna by a decree of June 16, 1703, with a capital of 7,000,000 florins ($3,500,000). It was created for the purpose of rescuing the government from the evils of a debased currency which even then existed, but was authorized to receive the deposits of individuals, like the similar establishments of Venice, Hamburg, and Amsterdam. It was essentially a governmental institution and was formed, like the Bank of Venice, for the funding of the public debt, which was to be accomplished by an annual levy upon the receipts of the Treasury for the security and retirement of the mandates or *assegni* which the new establishment was authorized to issue.[1] The experiment was not successful. The government was unable in the involved state of the finances to make the annual payments to which it was pledged and the mandates issued by the bank were received very reluctantly into the monetary circulation. The government finally turned the institution over to the City of Vienna and it took the name of the Bank of the City of Vienna. The transformation did not save it. The bank suspended operations in drafts on private account in order to devote its entire resources to refunding, but the expected means for this work failed and the bank went into liquidation at the expense of its depositors and shareholders. No further attempt was made to establish a national bank for over a century.

[1] Noel, I., 344.

The Austrian Empire found itself in 1761 in one of the most critical stages of its history. The headship of Germany, which descended to the Hapsburgs from Charlemagne, was escaping from Austrian control under the potent influence of Frederick the Great of Prussia, and Austrian finances were involved in an inextricable confusion in which the one patent fact of a deficit was all that was not obscure. The Count of Sinzendorff, one of the leading ministers of the Empire, noticed that the condition under which loans were contracted afforded no opportunity to small capitalists to invest. He presented, therefore, a project by which bills of from 20 to 100 florins were issued, with coupons attached indicating the value from day to day, with interest added at six per cent. Public depositories were authorized to receive these bills in payment of taxes and to disburse them to the creditors of the State at their value at the date of payment, including accrued interest. M. Noel says regarding the effects of this issue :

> The public were not slow to receive these bills with favor and the circulation attained immediately such proportions that the government felt able to dispense with the provision for interest, which created a heavy charge upon the Treasury. It decided to substitute, by a system of exchanges from day to day, paper money without interest for the original interest-bearing bills, which represented a particular kind of Treasury bonds ; and in redeeming the last, in order to avoid confusion, it issued notes of five, ten, twenty-five, fifty, and one hundred florins. Public opinion showed itself as favorable to the employment of the new money as to the circulation of the first, and the numerous facilities which it gave to daily transactions gave it a preference even over metallic money.[1]

The government could not content themselves with the moderate use of the power in their hands. A second issue of notes was decreed in 1769 and a third in 1771. Commerce was expanding, aided to some extent by the convenience of the new note issues, and the government seized the opportunity for injecting fresh masses of paper into the circulation. These excessive issues provoked a panic in 1797, which

[1] *Banques d'Émission en Europe*, I., 340.

obliged the government to give forced legal tender character to the paper and even to refuse its conversion into securities of the consolidated debt. Specie rose to a premium of thirteen per cent. in December, 1799, and began to disappear from circulation, and in 1800 the Treasury attempted to fill its place by the creation of notes of one and two florins (fifty cents and one dollar). Austria lost several Italian provinces as the result of the brilliant campaigns of Napoleon, and the inhabitants of those provinces who held Treasury bills overran the public depositories with the demand for payment in specie. The separation between coin and paper constantly grew wider, until in 1806 paper circulated for only half its value in silver, which was then the metallic standard. The Treasury made repeated promises, which could not be kept, that a part of the annual tax levy should be consecrated to the reduction of the paper circulation. The need for funds was so urgent that decrees were issued ordering the transmission to the Treasury of silver vessels, jewelry, the decorations of the churches and the consecrated fonts throughout the empire, which were paid for in paper money at three times their specie value.

The peace which followed the French victory at Wagram in 1809 and the marriage of the Archduchess Maria Louisa with Napoleon afforded an opportunity, which the government embraced, to attempt the restoration of order in the public finances. Delegates from all the provinces were assembled, but they found almost insuperable difficulties in the inefficiency and corruption of public officials and the absolute lack of confidence by the business community and the people in the oft-broken pledges of the government. The issues of government paper money had steadily increased from 74,200,000 florins ($37,000,000) in 1797 to 1,064,000,000 florins ($530,000,000) in 1811. The value of the paper had declined almost in proportion to the increase in the issues. The price of silver expressed in paper was 118 in December, 1800. It steadily rose to 203 in 1807, leaped to 500 in December, 1810, with the enormously increased issues of the three intervening years, and touched 1200 for a time in 1811.

The method adopted in France, when the territorial mandates were substituted for the *assignats*, was followed by Austria, which declared the reduction of existing issues to one-fifth of their original value and substituted redemption notes (*Einlosungsscheine*), which were called Viennese money. The decree of February 20, 1811, which put this reduction in force, was issued with the avowed purpose of arresting the fluctuations in the paper money, which were declared to be "so extremely pernicious, because they shatter private fortunes, fetter industry, derange all social relations, and give birth to distrust and jealousy."[1] The decree was despatched under seal to the officials in different parts of the Empire, to be opened at five o'clock in the morning on March 15, 1811, and the announcement was awaited by eager crowds who looked to the action of the Emperor to relieve the public distress. The majority, who held quantities of the paper, went away cursing the government for the decree. A few, who were believed to have had previous notice of its contents, had put their affairs in a shape which left them rich, as some of the purchasers of stock in the Mississippi Company of John Law had transformed it into real estate or exported the proceeds in coin while the stock was still selling at high figures. The government promised to limit the new issues of redemption paper to just enough to redeem the outstanding notes in the proposed ratio of one to five, which would be about 212,000,000 florins. The new notes were depreciated, however, from the first day of their issue and fell to fifty per cent. during the year, but rose to eighty-seven per cent. when the public began to believe that the quantity would not be increased. The suspension of new issues was only for a brief period and the necessities of the last Napoleonic wars forced the issues up to 638,900,000 florins ($319,000,000) in 1816.

The distrust and business paralysis caused by these repeated paper issues and the necessity of raising money to carry on the government led to the creation of the National

[1] Leroy-Beaulieu, II., 644.

Bank of Austria. The Emperor, in issuing the imperial patent for the establishment of the bank, invoked the public confidence by declaring that he had from the first desired to re-establish order in the standard of value, but that the violent shocks which had rent Europe asunder had involved Austria in a series of difficult wars, in which the preservation and the independence of the monarchy became dearer than mere questions of finance. He pledged himself to the people that no new paper money should be put in circulation and that the withdrawal of that already out should be confided to a national privileged establishment.[1]

A party of capitalists was formed after some delay and the statutes of the National Bank of Austria received the Imperial approval on July 15, 1817. The bank was accorded for twenty-five years the exclusive privilege of note issues, was exempted from the stamp taxes, and was authorized to accept deposits and discount commercial paper. The entire capital was to be 110,000,000 florins ($55,000,000) in shares of 1100 florins each, payable 100 florins in silver and 1000 florins in paper. The bank was able to dispose of only 50,621 shares, from which the proceeds were $2,600,000 in silver coin and $29,000,000 in paper. The government took up and destroyed the paper and issued an equal amount of securities bearing interest at the rate of two and a half per cent. As the notes were depreciated to one-third of their nominal value, this amounted to seven and a half per cent. upon the real capital realized, which was about $12,300,000 ($2,600,000 in coin and $9,700,000 in the coin value of the paper). The services of the bank in restoring confidence and business activity were further compensated by permission to issue a quantity of notes which the government pledged itself to accept as cash without the privilege, which was accorded to individuals, of demanding redemption in coin. The government showed its good faith by devoting to the retirement of the paper money a part of the war contribution paid by France, and 131,829,887 florins were soon withdrawn

[1] Noel, I., 345–46.

from circulation, reducing the amount outstanding to 546,886,038 florins ($273,000,000). The bank continued the process of converting the government money into bank-notes until on December 31, 1847, the amount outstanding was reduced to 9,712,838 florins ($4,850,000).

The uprising in Hungary in 1848, the Crimean War, and the Italian struggle which resulted in Austrian defeat at Magenta and Solferino, imposed new charges upon the Austrian government and did much to upset the work of the bank during the thirty years of peace from 1816 to 1846. The bank had proceeded so rapidly with the conversion of the government paper money as to endanger its own security and alarming runs were threatened in 1831, and again in 1840, which were only averted by the help of the government and in the latter case by a loan of coin from the private banks of Vienna. The charter of the bank expired in 1842, but the Emperor signed a patent renewing its privileges, with some modifications, until December 31, 1866. The bank had enjoyed until this time the exclusive privilege of discount as well as the monopoly of note issues, but the former privilege was now thrown open to others and the power to make loans upon real estate mortgages was withdrawn. The bank had contributed somewhat to the expansion of commerce by its discounts, but its immense advances to the government prevented its applying so much capital as was needed for the development of new private enterprises. Financial societies and private banks of discount had sprung up in the important centres and their success and legality depended upon sharing with the National Bank the power to make discounts and advances.

The bank at the end of the year 1847 possessed a metallic reserve of 70,240,000 florins ($35,000,000) and maintained a circulation of 213,000,000 florins. The outbreak of the revolution in Hungary brought the bill-holders in crowds to the bank for the redemption of the notes and the coin reserve shrunk in a few days to 35,023,030 florins. The directors were seized with panic and secured from the government the decree of June 20, 1848, authorizing the bank to suspend

specie payments and giving forced legal tender character to its notes. The government hesitated to take this desperate step and accompanied it with decrees intended to prevent the export of gold and silver, even to the amount of more than 100 florins ($50) in the pockets of tourists. The government at the same time resumed the issue of its own paper promises in the form of interest-bearing mandates, redeemable in four, eight, and twelve months. The fifth of these issues, in 1849, was given forced legal tender character and the notes were no longer to be redeemed in coin. Gold and silver began to disappear from circulation, pieces of six and ten kreutzers (one to two cents) were coined only to disappear, and bank bills of one florin and Treasury bills of six and ten kreutzers were issued to take the place of the smallest coins. The credit of the bank began to sink with that of the government and the depreciation of the bills in the middle of 1849 to about half their nominal value alarmed the administration and led to a solemn declaration that no more loans should be demanded from the bank and that the existing debt should be adjusted and consolidated.

The history of the thirteen years from 1848 to 1861 is the history of the disregard of this pledge and of repeated loans negotiated through the bank in spite of continual efforts to refund the debt and reduce its proportions. The aggregate of funded and floating debts due the bank by the government was 178,500,000 florins on January 1, 1849, and 205,300,000 florins on January 1, 1850. Considerable reductions were made during the next four years and the figures were carried down to 121,700,000 florins on January 1, 1854. The provisions for the Crimean War forced the figures up again with a bound to 294,200,000 florins ($147,000,000) on January 1, 1855. The reduction of the debt began again the next year and continued until it was reduced on January 1, 1859, to 145,700,000 florins, but the war with the Italian States and France carried the amount up again to 285,800,000 florins.[1] M. Paul Leroy-Beaulieu, after reviewing the

[1] Leroy-Beaulieu, II., 646.

long series of negotiations between the government and the bank, sums up the lesson of these years as follows :

It is apparent how political events hurled the state farther and farther down the path of forced legal tender at the moment when the resumption of specie payments seemed at hand. It is apparent also of what little use were pledges, whether of realty or securities, to hasten the liberation of the state and to permit the bank to terminate the suspension of specie payments. It is because all such pledges are incapable of negotiation at short notice without great loss. It is apparent also what singularly advantageous conditions the bank obtained from the state for its advances. It enjoyed an interest of two or three per cent. on sums in paper which cost it nothing.[1] This situation was too favorable for the bank for it to show itself rigorous towards the state. Every exhibition of complaisance which it made was the source of abundant revenue. This rate of two or three per cent. was extravagant. In France one per cent. was adopted and in Italy six-tenths of one per cent. The transformation, for such a long period of time, of a great establishment of credit into the official lender of the state had the disastrous consequence that this establishment could with difficulty fulfil its natural mission of lending to commerce. One cannot serve two masters, and a bank which always has its hand in its coffers to make advances to the state is compelled to show itself more stringent towards manufacturers and merchants.

The attempt to resume specie payments seemed upon the eve of success in 1859. A monetary convention was concluded January 24, 1857, with the view to securing a uniform currency throughout Germany, by which the contracting parties, of which Austria was one, were to issue no more legal tender paper after January 1, 1859, which was not redeemable in coin on demand. An Imperial ordinance of April 30, 1858, prepared the way for resumption by providing that after November 1st of the same year one-third of

[1] M. Noel seems to ignore this element of the bank loans and says : "The bank, during the entire period which elapsed from its origin to 1861, had risen to the level of its heavy task. It had contributed energetically to sustain the government in the difficult situations which it had traversed and its support, often disinterested, had merited general confidence. Far from abusing the opportunity of the multiplied crises which had obliged the Imperial Treasury to appeal to it, it had endeavored to lighten the burden of the sacrifices imposed by events upon the country."—*Banques d'Émission en Europe*, I., 364.

the new bills should be covered by coin or bullion and that the other two-thirds should be represented in the assets of the bank by securities or commercial paper. An arrangement was also concluded between the government and the bank for the retirement of 100,000,000 florins in small notes by the pledge of the domains of the State. War with Italy upset these carefully laid plans and on April 29, 1859, the bank was again released from the obligation of coin redemption, and the government appealed to it for a loan of 200,000,000 florins. This was met, to two-thirds of its face value, by the issue of bank-notes entirely in denominations of five florins ($2.50). The public had no use for so many small bills and they rapidly returned to the bank. The loan with which it was sought to pay this advance by the bank proved a failure and the government was compelled to deliver a variety of securities in addition to the unplaced obligations of the loan, with a condition that they should not be marketed before November 1, 1861.[1]

The management of the bank decided on May 9, 1853, to issue the 49,379 shares which had remained undisposed of since 1820 and they gave the preference to the holders of the original shares, at the rate of 800 florins payable in bank bills, which were then below par. The bank was again authorized by a decree of October 21, 1855, to loan money on mortgages and issue mortgage bonds. This branch of business rapidly developed and on December 31, 1858, already employed about 37,000,000 florins ($18,500,000). The capital of the bank was again doubled and immediately afterwards increased by 50,000 new shares issued at the rate of about 725 florins, which made the total capital on December 31, 1855, about 110,250,000 florins ($55,000,000). A law of November 13, 1868, reduced the capital again to 90,000,000 florins ($45,000,000).

The approach of the termination of the privileges of the bank led to an earnest discussion, which resulted in the law of December 27, 1862, remodelling the charter of the insti-

[1] Leroy-Beaulieu, II., 650.

tion and its relations with the government. The government proposed the renewal of the charter until 1890; the finance committee of the elective chamber proposed 1880. The subject was referred to a mixed committee of both chambers, which finally fixed the limit at December 31, 1876. The privileges of the bank were broadened from time to time until 1877, when the law of December 20th, terminating the commercial treaties, provided also that the ministry should conclude an arrangement with the bank extending its privileges until March 29, 1878. A subsequent act made the limit May 31, 1878, and one month later the National Bank of Austria was fused with the Austro-Hungarian Bank.

The National Bank, during its later years, in spite of the manner in which it was fettered by its relations to the government and the suspension of specie payments, conducted its relations with the business community in such a way as to contribute in a considerable measure to the expansion of industry. The business paper carried increased from about 32,000,000 florins ($16,000,000) in 1848 to 75.000,000 florins in 1854 and 90,000,000 florins ($45,000,000) in 1855. The advances on public securities increased from about 15,000,000 florins in 1848 to 50,000,000 florins in 1854 and 82,000,000 florins in 1855. The discounts increased nearly forty per cent. from 1865 to 1877 and would probably have reached a larger figure but for the liquidations following the crisis of 1873. The following table shows, in florins, the aggregate amount of the commercial paper discounted every alternate year from 1865 to 1877:

YEAR.	AT VIENNA.	AT AUSTRIAN BRANCHES.	AT HUNGARIAN BRANCHES.	TOTAL.
1865	383,648,611	63,924,852	23,563,202	471,136,665
1867	183,330,404	76,028,931	37,340,086	296,699,422
1869	232,424,629	125,830,418	103,590,858	461,845,906
1871	331,436,438	173,573,951	134,386,521	639,396,911
1873	468,286,132	240,007,674	168,973,050	877,266,856
1875	310,430,552	221,522,518	147,671,119	679,624,190
1877	298,706,477	212,324,840	135,296,195	646 327,512

The provisions for regulating the note issues which were adopted in 1863 bear the traces of the English legislation of 1844. They provided for an "uncovered" circulation of 200,000,000 florins ($100,000,000) and that all notes issued beyond that sum should be covered by gold or silver coin or bullion. The uncovered circulation was required to be protected by commercial paper, by securities deposited for advances, by the coupons of mortgages matured and payable or by mortgage bonds of the bank. This last form of securities was not allowed to exceed 20,000,000 florins and they were accepted for only two-thirds of their nominal value. Gold coin or bullion was at that time allowed to take the place of silver to the extent of only a quarter of the metallic reserve. A decree of October 30, 1868, authorized the bank to count as security for the uncovered circulation bills of exchange drawn upon foreign places, and a law of March 18, 1872, gave the bank discretion as to the proportion of gold and silver to be kept in its reserves.

The attempt to tie the note circulation rigidly to deposits of specie broke down as completely in Austria as it has broken down in England every time that a crisis has occurred. The first suspension of the limit was authorized by the government for a brief period in 1866. The bank was compelled again in 1869 to suspend advances upon private deposits of bullion and did not resume this branch of its business for two years, in spite of the protests of manufacturers and brokers. The bank pursued a very conservative course while the fever of speculation was upon the country, but was unable to come to the rescue of mercantile credit when the crisis of 1873 broke out, because of the limitations upon its circulation. The condition of credit became so critical that the government was obliged to intervene in almost precisely the same manner as in England. A letter was addressed to the bank by the Minister of Finance on May 13, 1873, revoking the provisions of Article 14 of the statutes of the bank, relative to the metallic security for bank-notes, and an ordinance to the same effect was approved by the Diet. The ordinance gave the bank authority to issue notes

by discounting bills of exchange and making advances on public securities without any other limitation than its own good judgment. Under this authority the bank granted extraordinary credits to the amount of 64,451,000 florins in Austria, and 30,119,000 florins in Hungary. The circulation exceeded the legal limit several times in May and July and was almost continuously above the limit during October, November, and December, 1873. The effect of the action of the bank was almost instantaneous in restoring credit. "The first moment of panic passed," says M. Clément Juglar, "it was seen that commerce and industry continued to make good head and that the vital forces of the country were not exhausted, the crisis having been specially severe in everything affecting the bank." [1]

Payment in coin on demand was nominally the condition upon which the bank held its privileges, but the situation of the government and its relations with the bank were such that it was thought necessary to maintain forced legal tender for an indefinite period. A convention was signed between the bank and the government on January 3, 1863, providing for the resumption of specie payments by the bank during 1867, but the war with Prussia postponed the event and the country continued to stagger through the mire of irredeemable paper. An act of May 5, 1866, authorized the government to issue 150,000,000 florins in government bills, including notes of one and five florins which had already been issued by the bank and which were now declared to be bills of state. The disasters of Sadowa and the other events of the war drove the government to the old device of John Law and the French revolutionists, to guarantee a part of its paper issues by the salt mines of Gmund, Hallein, and Aussee, at the same time that the pledge was given that the maximum of the two forms of the floating debt—the paper money and the salt notes (*Salinenscheine*)—should not exceed 400,000,000 florins. This pledge was not kept to the letter, but the actual circulation was never greatly above the

[1] *Des Crises Commerciales*, 496.

legal maximum. The mean circulation of the old paper money in 1876 was 343,029,232 florins and of the salt notes 68,970,395 florins.

An effort was made in 1867 to bring Austria within the circle of the Latin Union and to harmonize her monetary system with that of France, Italy, Belgium, and Switzerland. The government consented to the coinage of pieces of eight and four florins in gold, equivalent to pieces of twenty and ten francs ($4 and $2). The Franco-German war arrested the negotiations before they had been ratified, but the Imperial government immediately began the coinage of the proposed pieces, and they were accepted in France in public depositories by virtue of a decree of June 14, 1874. Their coinage averaged about 3,000,000 florins ($1,500,000) per year, until it was suspended by the laws which reorganized the monetary system in 1892.

The domestic troubles which broke out in Austria before the defeat of Sadowa led to the reorganization of the Empire according to the system of dualism which now prevails. The Hungarian Diet was convoked at Pesth on November 19, 1866, and a basis of union with Austria upon the conditions of local independence was prepared by a committee of sixty-seven headed by Francis Deak. The Hungarian budget was to be entirely independent of that of Austria in all internal affairs except those affecting the army. The officials of the bank regarded their interest as fully protected in both Austria and Hungary by the law of 1862, but the bank soon found its rights in Hungary called in question and sought a new arrangement which would place them beyond attack. The Hungarian Diet passed a vote early in 1870, promising recognition to the bank until the expiration of its privileges in 1876, if the bank would consent to a payment to Hungary in the same proportion as that made to Austria, and if it would establish at Buda-Pesth an independent directorate for Hungary. The bank was willing to make a payment of 4,500,000 florins, but this was not acceptable to the Hungarian cabinet and the privileges of the bank approached expiration without an agreement. The Imperial government

then brought forward a plan for terminating the existence of the National Bank of Austria and substituting in its place a new institution to be known as the Austro-Hungarian Bank. The proposition became law and the new institution was established for a term beginning July 1, 1878, and ending December 31, 1887. The charter was afterwards renewed for a period of ten years ending on December 31, 1897.

The new bank succeeded to all the transactions of the old and a directorate was established at Buda-Pesth and a sum of 50,000,000 florins ($25,000,000) set aside for discounts and advances in Hungary. The bank-notes of the institution are required to be printed in both the German and Hungarian tongues and to bear the arms of the monarchy. The governor of the bank is named by the Emperor, upon the joint nomination of the finance ministers of Austria and Hungary, and the two deputy governors are chosen from the two parts of the Empire. The changes made in the provisions for the note circulation had in view the new character of the bank as a representative of the two monarchies and the purpose of the government to resume specie payments. The certificates and matured coupons of the Austrian and Hungarian debt were included among the legal securities for the covered circulation and it was provided that the two principal establishments at Vienna and Buda-Pesth might issue bills on deposits of silver coin and bullion at the rate of forty-five florins to the pound of fine silver. This provision became inoperative when the government in 1879 suspended the coinage of silver on private account.

The amount of 200,000,000 florins has been steadily adhered to as the limit of the uncovered circulation, but the rule is now followed of keeping coin and foreign gold bills to the amount of forty per cent. of the entire volume of bank-notes in the hands of the public. The difficulties caused by a rigid limit of circulation in 1873 were guarded against, upon the extension of the bank charter in 1887, by the adoption of the German system of the five per cent. tax on the circulation. The method of determination is substantially the same as in the case of the German Imperial

Bank. Weekly reports are required, and upon the amount by which the aggregate circulation exceeds the sum of the metallic reserve and the uncovered circulation of 200,000,000 florins, a tax is levied of $\frac{5}{4}\frac{5}{8}$ of one per cent. for the weekly excess. The notes of the Austro-Hungarian Bank are a legal tender throughout the Empire for their full nominal value in all payments to be made in Austrian money, in the absence of a specific contract or a judicial decision requiring payment in specie.[1]

Political conflicts between Austria and Hungary embarrassed the bank and delayed the complete restoration of specie payments which was undertaken in 1892. It was only by temporary conventions that the life of the bank was extended from 1897 to 1899, and even the extension of the charter in the latter year to 1910 was limited by the proviso that if the union between the two countries should terminate at the close of 1906, the privilege of the bank should terminate also.[2] A more distinctly political character was given to the organization of the bank by the enlargement of the power of the governor, the provision that the general council should be composed of equal numbers of Austrian and Hungarian subjects, and the requirement that the sessions of the council should take place alternately at Vienna and at Buda-Pesth. Even this arrangement, coupled with many new restrictions upon the bank, was threatened for a time by the refusal of the Commission on the Debt to pay over to the bank the amounts contemplated by the agreement for the retirement of the government paper money, but the danger was averted by a change of ministry.[3] The payment was made by the Witteck ministry and the arrangement went into force.

The essential steps towards the resumption of specie payments in Austria-Hungary were taken by the monetary laws of 1892. The ministers of finance of the two parts of the

[1] Noel, I., 458.

[2] *Économiste Européen*, June 23, 1899, XV., 794.

[3] Raffalovich, *Le Marché Financier en 1899–1900*, 550.

Empire on February 26, 1892, invited a number of eminent financiers and political economists to meet and consider the following questions:

1. What standard ought to be adopted when the currency is reformed?

2. In case of the adoption of the gold standard, should a limited circulation of silver money be admitted and to what amount?

3. Is the circulation of government notes advisable, bearing no interest, redeemable in legal money and not made a forced legal tender, and under what conditions?

4. According to what principles should the conversion into gold of the existing florin be regulated?

5. What monetary unit is it advisable to choose?

The inquiry in Austria was entrusted to a commission of thirty-six persons, under the presidency of Herr Steinbach, the Minister of Finance, and the sittings continued from March 8th to March 17th. The inquiry in Hungary was made by a commission of twenty-one under the presidency of Herr Wekerle. The first question was answered by a large majority in favor of the gold standard. The second question led to a greater division of opinion, but the majority seemed disposed to favor as large a use of silver as was compatible with the absolute maintenance of the gold standard. The majority also favored the continuance of a circulation of 50,000,000 to 100,000,000 florins in government notes not fully covered by coin. A few believers in a strictly metallic currency opposed any such use of paper money, and argued that its continuance would shake confidence in the monetary system. The fifth question was answered in favor of the maintenance of the florin or its division into two parts, if a smaller unit were desired. The answer to the fourth involved the old controversy regarding the effects of the restoration of a metallic standard after business had been conducted and contracts made for many years on a depreciated paper basis. The definite answer to this and the other questions was finally given by the government, without following in all respects the recommendations of the commission.

The proposals of the ministry were submitted to the Parliament of both countries on May 14, 1892, and were made law throughout the Empire on August 11th. The crown (*kronen*) was made the monetary unit upon the basis of cutting a kilogram of fine gold into 3280 crowns, and a kilogram nine-tenths fine into 2952 crowns. The value of the new coin in United States money is 20.3 cents or about one-twentieth more than the French franc. The crown was divided into 100 heller, and gold pieces of ten and twenty crowns were ordered to be coined. Austrian ducats were still authorized to be coined as money of commerce, but the coinage of pieces of four and eight florins under the terms of the treaty with France was discontinued. Silver pieces were provided for of one crown ($0.203) and of fifty heller ($0.1015) and nickel and bronze pieces of smaller denominations. The silver pieces were to contain only 835 parts silver in 1000 parts, making them substantially token coins, and their legal tender quality was limited to fifty crowns ($10).[1]

The government decided to convert the paper money at the rate of one florin for two crowns. This was the rate which was under discussion by the commission, and while it adhered pretty closely to the current rate of exchange it involved a reduction of the nominal value of the paper in gold about sixteen per cent.[2] It had been urged by several members of the commission that it was desirable to convert foreign obligations upon the basis of parity in gold, in order to maintain the public credit, even if it were more just to convert the money of domestic circulation at the rates which had ruled for a dozen years.[3] The problem of conversion was complicated by the fact that the Austrian metallic standard, so far as there had been any, had been silver rather

[1] Ordinance of August 8, 1892, *Bulletin de Statistique*, Sept., 1892, XXXII., 318–22.

[2] Two crowns being worth 40.6 cents, their even exchange for one florin, nominally worth 48.2 cents, left a reduction of 7.6 cents in the value of the florin, which is about 16 per cent.

[3] Raffalovich, *Le Marché Financier en 1892*, 96.

than gold and many obligations were specifically payable in silver. The suspension of silver coinage on private account in 1879 gave a fictitious value to Austrian silver coins, just as it was attempted by the British government to give such a value to Indian rupees in 1893, and the florin ceased to fluctuate with the silver bullion market while remaining below both gold and paper. The government did not in 1879, however, abandon the silver standard and from 1879 to 1891 coined not less than 125,500,000 silver florins at the mints of Vienna and Kremnitz. The rate of conversion adopted for the paper currency, therefore, was not exactly the scaling of a gold obligation, for gold only became the standard on the date that the rate of conversion was fixed. The rate represented about the average exchange from 1879 to 1891.[1]

The bank was required to establish gold payments upon the basis of the new rate of exchange. The result was a considerable benefit to the bank, for it had in its vaults on August 7, 1892, 59,757,000 florins in gold and 20,428,000 florins in foreign bills payable in gold, which at the new rate acquired a higher nominal value. The bank carried 13,500,000 florins in foreign bills to its special reserve fund, and was still able on August 15th to report a cash reserve of 70,666,000 florins, including 619,876 florins received during the preceding week, and foreign bills in hand payable in gold, to the amount of 10,404,000 florins.[2] The addition was made to the special reserve fund in order to avoid increasing the limit of covered note issues, which was not thought advisable without consultation with the government. The entire operation was simply a matter of bookkeeping and added nothing to the real resources of the bank or to the value of its gold. The gold had formerly been counted at its face value, while its real value, expressed in terms of depreciated paper, was much greater. The change simply recognized this fact and in bringing the gold and paper

[1] Haupt, 58–64.

[2] *Le Marché Financier en 1892*, 102.

together gave a nominal value to the former corresponding to the reduced standard. The purchasing power of a given weight of gold remained the same under either method of bookkeeping, but the gold was intended to become under the new system a money of actual circulation instead of a bullion reserve expressed in a standard above the real one.

The importation of gold followed quickly on the establishment of the standard and was promoted by the policy of the bank, which raised the discount rate and made advances to facilitate arbitrage transactions when exchange seemed to be unfavorable. The receipts of gold by the bank from April 11th to October 10, 1892, were 38,759,000 florins ($19,000,000), of which a large part was in pieces of American origin. Receipts from India became heavy in November and raised the total receipts from August 11th, the date of the promulgation of the new laws, to December 31, 1892, to 39,447,000 florins. The state also availed itself of foreign bills in its possession to accumulate gold and at the close of 1892 had about 40,000,000 florins in the hands of the Austrian ministry and 50,000,000 florins in the hands of the Hungarian ministry. A new project was adopted in 1894 for retiring the government paper money and substituting bank-notes and subsidiary silver. An arrangement was made with the Austro-Hungarian Bank to sell 40,000,000 florins in silver for coinage into pieces of one crown and to issue 160,000,000 florins in bank-notes as the government notes were received and cancelled. The Treasury agreed to pay over to the bank 200,000,000 florins in gold ($100,000,000), which was to be used only as the coin guarantee of the new notes, florin for florin. The first notes retired were those of one and five florins and considerable opposition developed among the people at surrendering the convenient paper notes for the more cumbersome silver. An economist of note, Max Wirth, urged that the retirement of paper should begin with notes of 50 florins ($25) instead of the small notes, but the government adhered to its original plan.[1]

[1] Raffalovich, *Marché Financier en 1893–4*, 113.

The crisis of 1893 in the United States and the rather unfavorable condition of the money market in Germany had a reflex influence upon Austria which arrested her steps towards a gold basis and prevented any considerable increase in her gold fund during that year. The reappearance of a premium on gold, running from three to seven per cent., in paper money and bank notes, caused a deal of disappointment and much inquiry as to the reason. The critics of the government ascribed it to the attempt to convert the old five per cent. obligations into four per cents., which resulted in bringing back into Austria a large quantity of securities held abroad. It was calculated that the importations of securities during 1893 exceeded the exports by 114,690,000 florins ($57,000,000).[1] The Minister of Finance pointed out that this inward current was almost wholly in securities payable in silver and that it was necessary to cut the bond which nominally bound the two metals together in the Austrian currency system. A reason was found for the change in some quarters in the state of the money market at Berlin, which was swamped with South American and other securities of little value, which had absorbed the ready money of German capitalists. The Austrian securities were among the few of real value which were held in Germany, and money could be recovered at the smallest loss by returning them to Austria, whose people were buying their own securities at good prices. This tendency, though doubtless heightened in the case of Austria by the conversions and by the fear of payment in silver, only confirmed a principle which has become marked in recent years—that the securities issued by a solvent power tend, after their original placement, to return into the hands of its own people. This was observed in the United States in 1878, when it was estimated that five-sixth of the public debt had returned into the hands of Americans; in France, after the great loans to pay the German war indemnity; and even in Italy, who originally paid two-thirds of her interest

[1] *Neue Freie Presse*, January 1, 1894.

charges abroad, but now pays hardly a fifth outside the Kingdom.[1]

The new monetary system, by which the gold crown ($0.203) became the unit of value, went into operation in 1900. The sum of 112,000,000 florins ($22,736,000) in government bills was gradually replaced, with the help of the bank, by 5-crown pieces in silver and new bank notes. The bank received from the Treasury 224,000,000 crowns in new gold pieces of 20 crowns, which exactly equalled the outstanding government notes, and afforded a complete cover for 64,000,000 crowns in 5-crown pieces and 160,000,000 crowns in 10-crown notes. Of this deposit the government of Austria paid 156,800,000 crowns and that of Hungary 67,200,000 crowns.[2] The circulation of old notes ceased to be permitted after September 1, 1901, and the notes ceased to be legal tender after February 28, 1903. Already by the first of October, 1902, the amount outstanding had fallen to 6,500,000 crowns ($1,319,500), and the gold in circulation early in 1903 consisted of 35,980,510 crowns in 10-crown pieces and 103,923,160 in pieces of 20 crowns ($4.06). By the close of 1903 the gold resources of the bank were 1,250,000,000 crowns and afforded a cover of 86 per cent. for an outstanding circulation of 1,550,000,000 crowns. Only political differences between the different parts of the Dual Monarchy stood in the way of a mandatory law compelling the redemption of bank-notes in gold on demand.[3]

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[1] *Vide infra*, 28.

[2] Raffalovich, *Le Marché Financier en 1902–1903*, 817. The economic effect of these operations is thus described by Willis: "It was sought to transform the legal-tender notes into bank notes and then to provide for their management upon banking principles. In this way the volume of the circulation would not be disturbed. The means of obtaining the bank notes for the redemption of the legal tenders were, however, in this case thoroughly sound."—"The Austrian Monetary Reform," in *Sound Currency*, August, 1899, VI., 127.

[3] One of the grounds of indifference in Austria was the feeling that resumption of specie payments would enable Hungary to emancipate

Control of the foreign exchanges was the capstone of the structure of gold redemption, and this could not be attained while the government kept its gold resources with private bankers and relied upon them to meet its obligations abroad. This was the condition prevailing down to the summer of 1901, when Count von Bilinski, the governor of the bank, after much previous negotiation, arranged a meeting on August 8th, at his home at Ischl, with the finance ministers of the two governments. It was then agreed that the public deposits should be transferred from the Rothschilds and other private bankers to the Austro-Hungarian Bank, and that the latter should not only attend to government payments abroad, but should furnish exchange freely for private parties and should begin the tentative issue of gold coins in the interior.[1] It was a complex and delicate task and involved several changes in the organization of the bank. Among other measures gold customs drafts were issued by the bank in exchange for foreign and domestic gold coin, thereby economizing the movement of gold and transferring disputes as to the value of foreign coins from the customs offices to the bank.[2]

These measures were eminently successful in maintaining parity of exchange with gold countries and in enhancing the volume of business and the financial importance of the bank. Within about five years gold was paid out to the amount of 1,250,000,000 crowns, of which four-fifths came back to the bank and one-fifth remained in the domestic circulation. Operations in foreign exchange in 1900, prior to the Ischl agreement, were £52,000,000 in English money, 270,100,000 francs in French, and 1,047,700,000 marks in German money. Transactions in French and German money had more than doubled in 1906, and in the stress of 1907 the

herself entirely in financial matters from Austria.—Raffalovich, *Le Marché Financier en 1901–02*, 614.

[1] *Économiste Européen*, April 24, 1908, XXXIII., 516.

[2] *Ibid.*, May 1, 1908, XXXIII., 549.

total of exchange operations reached 2,966,300,000 crowns ($602,000,000) and the bank was able to congratulate its shareholders that it was able to maintain a discount rate of six per cent., while higher rates prevailed in the countries around it.[1]

The action of the government in buying silver for subsidiary coinage from the bank proved a great aid to the latter in solving the problem what to do with its large stocks of silver accumulated when that metal was near the old parity with gold. The cash reserves of the National Bank of Austria and of the Austro-Hungarian Bank consisted almost exclusively of silver while that metal was at a premium over gold, but gold began to flow into the bank in 1871, and soon came to constitute about half the reserve. The gold then remained nearly stationary in amount for ten years, while the silver rapidly increased. This difficulty has not been serious in recent years, and the gold stock has come to exceed the silver by about four times. The gold held at the close of 1906 was 1,112,263,245 crowns, and decreased to the close of 1907 only to 1,099,393,421 crowns ($223,150,000). The silver stock decreased during the same interval from 282,055,904 crowns to 281,485,199 crowns ($57,130,000). In spite of the change in the monetary unit, computation in florins long lingered in Austria. It was encouraged by the continued use of the silver pieces of one florin, of which the bank possessed a large stock. It was decided early in 1908 to discontinue the issue of silver florins and to coin at once a large part of those in the reserves of the bank into pieces of one crown.[2]

The proportions of gold and silver held and other statistics of the bank, before the change in the monetary unit, appear in the following table;

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[1] *Generalversammlung der Oesterreichisch-Ungarischen Bank am 3 Februar, 1908*, xviii.

[2] U. S. Consular Reports, August 12, 1908, 14.

YEAR.	SPECIE RESERVE. DEC. 31ST. GOLD.	SILVER.	MEAN CIRCULATION.	MEAN CURRENT ACCOUNTS.	MEAN DISCOUNTS.
	(In millions of florins.)				
1865	1.5	120.0	350.0	1.3	—
1870	1.4	112.9	296.8	—	—
1875	67.8	66.5	286.2	1.5	—
1880	65.0	108.3	316.6	1.4	113.4
1883	77.7	121.7	457.7	1.9	144.2
1884	78.8	126.6	358.4	2.1	136.4
1885	69.1	129.7	347.4	2.7	117.5
1887	71.0	145.1	366.0	2.2	129.1
1888	59.0	154.0	384.6	5.6	141.7
1889	54.3	162.2	399.3	7.2	149.2
1890	54.0	165.5	415.6	7.3	156.7
1892	103.2	168.9	425.9	8.3	151.2
1893	101.8	161.9	464.0	11.1	168.3
1894	155.3	139.2	458.9	10.7	151.6
1895	244.0	126.6	527.4	11.1	164.3
1896	302.1	125.7	587.6	10.3	159.8
1898	359.4	123.9	657.5	12.3	175.0
1899	393.0	106.0	676.4	17.9	185.5

The capital of the bank was changed, when the new monetary system took effect in 1900, to 210,000,000 crowns ($42,630,000). The increase from 180,000,000 crowns was accomplished by transferring 30,000,000 crowns from surplus, which was thus reduced to 6,514,000 crowns, but was gradually built up again to 15,305,349 crowns at the close of 1907. The principal accounts of the bank under the new monetary unit are shown in the following table:

Accounts of the Austro-Hungarian Bank, 1900–1913.

DEC. 31.	NOTES.	METALLIC RESERVE.	DISCOUNTS.	MORTGAGE LOANS.
	(In thousands of crowns = $0.203.)			
1900	1,494,023	1,218,100	455,501	299,616
1901	1,584,934	1,448,070	335,055	299,830
1902	1,635,186	1,465,160	345,176	298,987
1903	1,770,847	1,462,411	400,258	298,520
1904	1,751,301	1,507,560	511,637	288,424
1905	1,846,992	1,425,069	641,273	283,086
1907	2,022,821	1,440,878	748,068	299,993
1909	2,188,040	1,713,018	687,784	299,983
1910	2,375,938	1,669,168	889,087	293,346
1912	2,815,797	1,507,575	1,341,107	299,454
1913	2,493,641	1,562,518	925,998	299,885

The circulation of the bank varies widely at different seasons. The degree of pressure for currency is indicated by the record of occasions on which notes have been issued in excess of the authorized limit and subject to the five per cent. tax. These occasions were more or less exceptional down to the close of 1905. During eighteen years ending with that year,—a period of 864 weeks,—excess issues appeared in fifty-five weeks, some of them for very small amounts. Of these issues twenty-three occurred in the month of October, which is the harvest month.[1] The first occasion was in the autumn of 1890, when the limit was exceeded 656,440 florins in the week of October 7th, and the excess rose to 23,257,080 florins during the week of October 31st. The excess of circulation declined to 17,093,710 florins in the following week and disappeared in the week of November 14th. The pressure was felt more severely in later years and especially in 1907, when there were twenty-two weeks of excess circulation, and after August 23d, issues were continuously above the authorized limit. The highest excess was in the week ending October 31st, when the amount was 242,067,000 crowns ($49,125,000). Then began a gradual improvement, which carried the excess down on December 15th to 25,074,000 crowns, to be advanced again temporarily by the end-of-the-year demand for currency, which carried the excess circulation on December 31, 1907, to 187,145,-

[1] Letter of the Governor of the bank to the New York Chamber of Commerce, July 22, 1906. In this letter Count von Bilinski declared that "the system of note taxation exerted no decided influence upon the discount policy of the bank, inasmuch as the Council of Administration, after careful consideration of all circumstances, had occasion to raise its discount rate repeatedly during times when the limitation of its note issue had not been reached; and also on several occasions when its limitations were reached, it maintained a discount rate lower than the legal five per cent. rate. Thus the cost of the tax was not borne by its clients, but by the bank itself."—*The Currency: Report by the Special Committee of the Chamber of Commerce of the State of New York*, 43.

000 crowns. The range of variation in the circulation before the change in the monetary unit is indicated by the following figures for representative years:

Fluctuations in Circulation.

(In thousands of florins.)

YEAR.	MAXIMUM.	MINIMUM.	AVERAGE.	OUTSTANDING DEC. 31ST.
1890	471,376	387,888	415,570	445,934
1892	491,709	381,371	425,959	477,987
1894	517,742	409,349	458,911	507,808
1896	668,009	536,832	587,656	569,726
1898	741,914	606,952	657,523	737,475
1899	736,408	636,302	676,413	728,981

Substantially the same range of variation has prevailed since the adoption of the crown as the unit of value and the practical restoration of stable exchange. In the year 1907 the circulation at the beginning of the year was 1,982,037,000 crowns ($402,300,000) from which it fell gradually to a minimum of 1,709,004,000 crowns ($346,900,000) on March 23d. From that date the demand for additional notes increased only slowly until September 23d, when the amount was 1,871,917,800 crowns. Then began the rapid upward movement caused by the combined influence of the autumn crop movement and the disturbances in the money markets of the world, which carried the circulation on September 30th to 2,001,892,000 crowns and on October 31st to 2,070,293,000 crowns ($420,200,000),—the maximum of the year. From this point there was a gradual decline to 1,865,210,000 crowns ($378,600,000) on December 15th, until the usual movement at the end of the year, which left the amount of notes outstanding on December 31st at 2,028,024,000 crowns ($411,600,000).

About one-third of the amount of the notes are for 20 crowns ($4.06). The number of these on December 31, 1907, was 32,978,829 out of notes outstanding to the number of 59,968,201, and their value was 659,576,580 crowns ($133,875,000). Notes of other denominations were 357,188 for

1000 crowns, 6,189,182 for 100 crowns, 4,604,357 for 50 crowns, and a small number in old notes in process of retirement.[1]

The volume of discounts fluctuates in much the same manner as the note circulation. The maximum of 1907 was 865,223,000 crowns ($175,630,000) on October 31st, the minimum was 525,410,000 crowns ($106,650,000) on February 23d, and the average for the year was 666,309,000 crowns. As in other European banks of issue, the greater part of the paper held is of even shorter maturities than is required by the statutes. Thus, of the amount held at the close of 1907, 468,849,397 crowns, or 62.67 per cent. of the whole, matured during January, 1908, and 25.47 per cent. during February, leaving only 11.86 to run longer than two months.

The rate of discount of the National Bank varied between 1817 and 1862 from five to eight per cent., and from 1863 to the fusion with the Austro-Hungarian Bank in 1878 never went higher than six and a half per cent. The changes in the rate of discount during these fifteen years were twelve, while those of the Bank of England were one hundred and fifty-two, of the Bank of France forty-six, and of the Bank of Prussia forty-five. The mean rate of the National Bank of Austria was not more than eight-tenths of a cent. above that of the Bank of England nor more than seven-tenths above that of the Bank of France, in spite of the much more complete industrial development of the latter countries.[2] The rate has varied even less during the more recent history of the consolidated bank. Fixed at four per cent. on May 9, 1879, it was raised to five per cent. October 20, 1882, reduced to four and a half on February 3, 1883, and to four per cent. on February 23, 1883. The rate was raised again to four and a half on October 7, 1887, and reduced to four per cent. on January 11, 1888. The rate of four per cent. was pretty uniformly maintained during the early part of the year for

[1] *Generalversammlung der Oesterreichisch-Ungarischen Bank am 3 Februar 1908*, 6.

[2] Noel, I., 382, 434.

some years, but the autumn rate was usually higher, reaching in 1890 five and a half per cent. An increase from four to five per cent. was made on October 7, 1893, but was followed by a reduction to four and a half in the second half of January, 1894, and to four per cent. on February 9th, where it remained throughout the year and until the autumn of 1895, when it was put at five per cent.

Reductions were made in the winter, which brought the rate down on February 14, 1896, to four per cent., where it was successfully maintained, through the elasticity of the note system, until the autumn of 1898. The scarcity of capital, which then afflicted Europe as the result of the war in South Africa and of other causes, forced the rate of discount at the Austro-Hungarian Bank to four and a half per cent. on October 14, 1898, and to five per cent. on November 25th. High rates prevailed, with slight relaxations, until the spring of 1901, when it became possible on March 1st to reduce the rate to four per cent. and in 1902, on February 5th, to three and a half per cent., for the first time in the history of the bank. This rate remained unchanged for more than three years, when the pressure again felt upon the world's stock of capital led to an advance on October 19, 1905, to four and a half per cent. Even then the advance was attributed at first to the attraction for Austrian gold which was afforded by high rates in foreign markets, but it presently appeared that there was real pressure at home as well as abroad.[1] Not until May 31, 1906, was a reduction made to four per cent., and on September 30th it became necessary to restore the higher rate, and on June 30, 1907, to make a further advance to five per cent. and on November 15th, to six per cent. The average rate for 1907 was 4.896 per cent.

The Austro-Hungarian Bank, like the Bank of France, has done much to extend accommodation to small merchants. The whole number of pieces of paper discounted in 1878 was 368,795, which grew in 1882 to 550,829; in 1887 to 704,608;

[1] Raffalovich, *Le Marché Financier en 1905–06*, 531.

in 1892 to 884,840; in 1897 to 1,380,405; and in 1907 to 2,944,077. The number of pieces for 150 florins ($60) or less was 374,238 in 1897. The number for 300 crowns ($60) or less in 1907 was 749,506.[1]

The number of branches of the Austro-Hungarian Bank had risen in 1907 to 46 in Austria and 33 in Hungary, outside the principal establishments at Vienna and Buda-Pesth. The bank at Buda-Pesth has been rapidly gaining in recent years in volume of business over the bank at Vienna, and the development of Hungary from a purely agricultural to an industrial country has created a jealousy which is among the causes threatening to the perpetuation of the bank in its dual form. The discounts at Buda-Pesth, which were 16,853,181 florins at the close of 1875 against discounts at Vienna of 51,109,319 florins, advanced at the close of 1890 to 35,688,570 florins at Buda-Pesth against 53,253,903 florins at Vienna, and at the close of 1894 to 43,410,814 florins at Buda-Pesth against 41,649,846 florins at Vienna. Still more remarkable has been the competition of the branches outside the two capitals. The relations in percentages of the volume of discounts outstanding at the different offices on three representative dates are shown in the following table:

Proportion of Discounts at Different Offices.

	Percentage.			Amount Dec. 31, 1907
	Dec. 31, 1894.	Dec. 31, 1899.	Dec. 31, 1907.	(crowns)
Vienna,	23.11	39.35	15.44	115,509,050
Austrian branches,	33.50	22.49	25.21	188,563,759
Buda-Pesth,	24.08	23.77	25.74	192,579,568
Hungarian branches,	19.31	14.39	33.61	251,415,719
Total,	100.00	100 00	100.00	748,068,096

An enlarged share in the profits of the bank was claimed by the state in the extension of the charter in 1899, as in the

[1] *Cf.* articles by the present writer in *New York Bankers' Magazine*, November, 1897, LV., 698, and April, 1899, LVIII., 528.

case of most other European banks in recent years. Taxes are levied upon the real estate and securities belonging to the bank and on the dividends paid to shareholders. Under the law of 1878, which was not radically changed in 1887, five per cent. of net profits went to the shareholders, ten per cent. of the remainder was added to the reserve, the dividend to shareholders was then made up to seven per cent., and half the remainder went into the treasuries of the two monarchies, in the proportion of seventy per cent. to Austria and thirty per cent. to Hungary.[1] This distribution was modified in 1899 so that the primary dividend to shareholders is only four per cent. After the allotment of ten per cent. of the remainder to reserve and a small amount for pensions, half of the remainder goes to the state and half to shareholders until their total dividend reaches six per cent., after which the state takes two-thirds.[2] Under this distribution net profits in 1907 were 29,925,536 crowns ($6,075,000), of which the shareholders received 16,119,640 crowns ($3,275,000) or at the rate of 7.67 per cent., while the state received 11,228,216 crowns, exclusive of taxes. Including 1,886,460 crowns paid upon excess circulation, the total share of the state on these two accounts was 13,114,676 crowns ($2,662,000). This is much larger than any previous allotment to the state, the amounts prior to 1906 having been less than 5,000,000 crowns annually. The rate of dividend in 1905 was 5.014 and in 1906, 6.457 per cent.[3]

The creation of an independent bank of issue for Hungary was one of the projects which grew logically out of the movement which gained momentum at the beginning of the twentieth century for the restoration of Hungarian independence. So insistent was the demand for a separate bank that when the convention for the continuance of the union between the two countries was prolonged for ten years in the

[1] Noel, I., 466.
[2] *Économiste Européen*, March 6, 1908, XXXIII., 298.
[3] *Moniteur des Intérêts Matériels*, January 15, 1908, 170.

spring of 1908, the question of the bank was left to a special commission. The markets were disturbed at first by the fear that the Hungarians were determined upon immediate separation, but confidence was restored by the decision of the commission of twenty-one appointed by the Diet to take a year for consideration.[1] At the end of that time the political demand for a separate institution was so insistent that it caused a cabinet crisis.[2] The question remained unsettled until August, 1911, seven months after the formal expiration of the charter of the bank. A law was then enacted (August 8, 1911) prolonging the bank's legal existence until the termination of the political union between Austria and Hungary at the close of the year 1917. Legal recognition was given by the new statutes to the portfolio of foreign bills, of which 60,000,000 crowns ($12,180,000) were to be counted as a part of the metallic reserve, and discretion was vested in the ministers of finance of the two governments as to the maximum amount of notes to be issued of 10 crowns and 20 crowns. A new division of earnings was provided, by which only one-fourth of the amount available goes to the shareholders and three-fourths to the state, after the dividend to the shareholders has reached seven per cent.[3]

[1] London *Economist*, April 4, 1908, LXVI., 736. The questions addressed to leading economists are given in *Économiste Européen*, April 10, 1908, XXXIII., 473.

[2] *Économiste Européen*, May 7, 1909, XXXV., 601.

[3] Raffalovich, *Le Marché Financier en 1911–12*, 367.

CHAPTER X.

THE BANK OF RUSSIA.

Its Relation to the Government and its Modern Development—The Long Régime of Paper Money and the Efforts in 1817, 1839, 1860, and 1881 to Bring it to an End—The Revision of the Charter in 1894—Final Success of Count Witte in 1897—The Question of the Rate of Conversion and the Gold Standard—How the Bank Went through the War with Japan—The Bank of Finland.

THE history of the Bank of Russia is of interest, because it is the most successful instance on a large scale of a bank of issue owned by the state and because it carried through in the closing decade of the nineteenth century the most serious operations ever undertaken in Europe for the restoration of stability of exchange upon a gold basis. Russia was for more than a century, with only brief interludes, under the régime of government paper money. The task of restoring sound conditions involved the solution of many monetary problems never before fully solved, and the accumulation of one of the three greatest stocks of gold in the world, the others being those of the Bank of France and the Treasury of the United States.[1] The solution of these problems fell to the lot of a succession of Ministers of Finance who rose to the level of their opportunities and obligations, and by their foresight and skill placed Russia upon the high-road to economic competition with the older and richer nations.

Paper money was introduced into Russia as early as 1768, and was welcomed at first because of its greater convenience

[1] These funds stood, respectively, about September 1, 1908: Bank of Russia, $541,300,000; Bank of France, $620,800,000; United States Treasury, $1,021,000,000.

than the copper money of which it was the representative. The pretext was maintained for a time that the paper was simply the coined certificate for the copper, and the notes, which were known as *assignats*, were at a slight premium. Bureaus were established at St. Petersburg, Moscow, and in the provinces for the redemption of the paper, which may be considered forerunners of the Bank of Russia. A ukase of January 10, 1774, prescribed that the limit of 20,000,000 roubles ($15,400,000) should never be exceeded in the issue of paper money. This pledge was disregarded, as most such limits upon paper issues have been, and after the limit had been raised to 100,000,000 roubles ($77,200,000) on June 26, 1786, in order to obtain resources for war with Turkey, the depreciation began. The price of the silver rouble had risen before the end of the century to 1.47 in paper roubles and the prices of merchandise had followed the upward course of the precious metals. The government endeavored to protect itself, at the same time that it recognized the depreciation of the paper, by a ukase of June 23, 1794, raising the capitation tax paid by the peasants, "in view of the fact that the increased price of all products permits them to earn more by cultivation and other work." [1]

The four most serious efforts to rescue the monetary system of the country from the mire of irredeemable paper were made in 1817, 1839, 1860, and 1881. The first attempt was made by means of loans placed both abroad and at home, of which a part of the proceeds was to be applied to the retirement of the paper circulation. The Emperor Alexander I., after the peace of Tilsit in 1810, recognized all the outstanding notes as a public debt, pledged the public faith to their redemption, and declared that no more paper money should be issued. The circulation, notwithstanding these pledges, climbed upward from 577,000,000 roubles in 1810 to 836,000,000 roubles in 1817. It was then that the loans

[1] Paul Leroy-Beaulieu's *La Science des Finances*, II., 656. The rouble was the exact equivalent of four francs in French money ($0.772) and exchange on Paris at par was quoted in the form of 400 francs for 100 roubles.

were issued which had been promised in a decree of May 27, 1810, and the progress of reform was so rapid that the circulation was reduced in 1822 to 595,776,000 roubles. Count Cancrin was then at the head of Russian finances, and he steadily refused to increase the paper circulation during thirteen years, in spite of wars in Turkey, Persia, and Poland. He hesitated, however, at the policy of substituting an interest-bearing debt for the immense mass of paper obligations bearing no interest and did not succeed in raising the value of the paper rouble much above a quarter of the rouble of silver.[1]

The government made the second effort to reduce the volume of paper money by a decree of July 1, 1839, that the paper roubles should be valued at three and a half to a rouble of silver and that a new form of paper should be substituted in this proportion. The new paper was to be known as bills of credit and was to be redeemable in silver and secured by the public domain. The exchange of the *assignats* for the new bills was ordered to take place on June 1, 1843, and a pledge was given to the business community for the credit of the new paper by depositing in the citadel of St. Petersburg in December, 1844, a metallic reserve of 70,464,245 roubles ($54,000,000), which was to be under the control of twenty-four members of the stock exchange. This fund was increased on July 14, 1845, by 12,180,000 roubles, which established a coin reserve of nearly fifty per cent. of the 170,000,000 roubles in bills of credit then outstanding. A limited redemption was maintained and the bills did not drop far below par until the Crimean War, but new issues of credit paper were made even before the alliance with Austria to crush Hungary and 735,000,000 roubles in the new bills were in circulation at the close of the Crimean War in 1857.

The third attempt to extricate the Empire from the evils of a debased monetary standard was connected with the establishment of the Bank of Russia in substantially the

[1] The greatest depression in the value of the *assignats* was in 1815, when 100 silver roubles exchanged for 418 in paper.—Lévy, 200.

form in which it existed from 1860 to 1894. The statutes of the bank were established by a decree of May 26, 1860, and the reserves of several older banking establishments were turned into its coffers and it assumed their engagements. The original capital was 15,000,000 roubles ($12,000,000) and the declared object of the bank was to consolidate the credit circulation and the floating debt of the Empire. The entire ownership and management were in the government, but the capital and reserve funds were declared to be inviolably set aside for the uses of the bank, and the private depositors were guaranteed against confiscation. A third of the profits were to go to a reserve fund, part of which was to be applied from time to time to the increase of the capital stock.[1] The capital was soon increased by this means to 25,000,000 roubles and the reserve fund to 3,000,000 roubles, where they remained until the reorganization of the bank in 1894. The bank had a metallic reserve on May 1, 1861, of 86,000,000 roubles against a circulation of 714,627,069 roubles, but the commercial discounts scarcely exceeded 14,000,000 roubles. The depreciation at this time was about ten per cent. and M. Lamanski, the deputy governor of the bank, proposed a plan for restoring parity and protecting the note issues. He recommended the transformation of the bank into a stock company, with the monopoly of note issue for twenty-eight years, the redemption of notes in coin according to a sliding scale gradually approaching par, and authority to sell the public domains, the forests and the state railways to protect the circulation.[2]

The plan of M. Lamanski was adopted in a measure, the proceeds of a loan of 15,000,000 roubles were carried to the coin reserve of the bank and it was decreed that bills received in payment for the loan should be destroyed and that new bills should be issued only against deposits of coin. A scale of depreciation was fixed which involved the restoration of parity on January 1, 1864. Redemptions proceeded

[1] Clément Juglar, Article "Banque" in *Dictionnaire des Finances*, I., 347.

[2] Winiarski, 57.

for a while without great losses of coin to the bank, and averaged 1,250,000 roubles per month up to January 1, 1863. A run then began for the redemption of the paper, which resulted in a net loss of coin during January of 2,287,000 roubles; February, 4,921,000 roubles; March, 7,723,000 roubles; April, 10,213,000 roubles; May, 10,367,000 roubles; June, 2,233,000 roubles; and in July, 6,751,000 roubles. Various devices were tried to stop the drain, but they were unsuccessful and coin redemption was suspended by a ukase of November 19, 1863. Exchange on Paris, which had risen on October 29th to 396 francs, within four francs of par, fell gradually to 350 francs, about which point it fluctuated for some time. The net result of the effort to restore specie payments was a reduction of the outstanding paper to 634,773,929 roubles on November 30, 1863, and a useless expense to the Treasury of nearly 100,000,000 roubles ($75,000,000).

The bank was entrusted in 1862 with the mission of buying lands for the peasants and was aided by the deposit of the Treasury funds free of interest. These funds were partly employed in commercial discounts, which were so freely granted that the legitimate necessities of commerce were much exceeded and a mass of doubtful paper was left in the hands of the bank in the crisis of 1873. The expansion of credits, however, was chiefly confined to St. Petersburg and Moscow, and the provinces suffered the usual evils of a country endowed with a single great bank,—the lack of capital, of currency, and of facilities for credit. The excess of capital at the centres caused reckless speculation and blind investments in foreign securities, while the excessive issues of paper money gradually found an outlet only after the emancipation of the serfs created a greater demand for currency for wages. One of the difficulties of the situation was the constantly recurring deficit in the public finances, which called for new issues of paper money to fill the void. This difficulty was overcome for a moment in 1870, when the deficit declined to 1,205,116 roubles, and during the next five years, which showed a considerable surplus. The

quotation of the rouble on the exchange market was 330 francs in 1876, or seventeen and a half per cent. below par, when the menace of war with Turkey and of new issues of paper money carried it down in 1877 as low as 234 francs, or a loss of more than 41 per cent.[1]

The new paper issues which were feared soon became a reality, in order to maintain the armies in the field. The circulation had risen on December 31, 1874, to 797,313,500 roubles and the metallic reserve had increased to 231,227,000 roubles. The circulation was reduced during the next two years until it stood on July 1, 1876, at 693,000,000 roubles. The issue of bills of credit on account of the war was 491,000,000 roubles and the net circulation on December 18, 1878, was 1,103,280,185 roubles. A supplementary issue of 96,000,000 roubles in 1879, with the famine and arrest of exports, caused a crisis in 1880 which reduced the revenues of the government and the railway receipts, in spite of high paper prices, and caused the rapid fall of the coin value of the rouble. The change of ministry which resulted from the crisis brought into power M. Abasa, who at once announced a plan for reimbursing the debt of the government to the bank. A ukase of January 1, 1881, ordered that the Treasury pay to the bank without delay a sum sufficient to reduce to 400,000,000 roubles the debt to the bank on account of disbursements for the government; that the remainder of the debt (400,000,000 roubles) be funded by annual payments of 50,000,000 roubles by the Treasury to the bank; that bills of credit be destroyed to the extent of their accumulation in the hands of the bank and with due regard to the needs of the circulation. The first part of this programme had hardly been carried out when M. Abasa was replaced as Minister of Finance by M. Bunge. The rigid policy of reform which had been inaugurated was somewhat relaxed and the bills paid into the bank were kept on hand and subsequently re-issued, instead of destroyed.[2] The circulation

[1] Winiarski, 59–60.

[2] M. Witte, who was later Minister of Finance, has been subjected to criticism for employing 92,700,000 roubles ($71,000,000) paid into

was reduced during the ten years from 1878 to 1888 from 1,188,000,000 roubles to 1,046,000,000 roubles, but the value of the paper rouble did not advance materially towards that of gold.

The statutes of the Bank of Russia were submitted to a complete revision in 1894 and an effort was made to make the bank of greater assistance than before in the promotion of industry and commerce. The first article of the new statutes, promulgated on June 24, 1894, declared the purpose of the bank to be "to facilitate, by means of credit for short terms, the movement of commerce and to promote the success of national industry and agricultural production." [1] The new statutes define with considerable precision the accommodation extended to agriculture and industry by the bank. The institution is authorized to open credits and make loans against bills secured by pledges of hypothecation and by agricultural or industrial material, by guarantee, and by other sureties which the Minister of Finance may recognize as sufficient. Loans secured on material are to be made only to acquire supplementary material or renew old supplies, but they are to constitute a lien upon the old material as well as the new. The material obtained by loans from the bank is required, in accordance with the protective policy of the Empire, to be of Russian fabrication, but exceptions may be authorized in certain cases by the Minister of Finance and, in the case of agricultural material, with the concurrence of the Minister of Agriculture. The maximum loan for an industrial enterprise is 500,000 roubles and for a retail mer-

the bank for cancellation, in the construction of the Trans-Siberian Railway.—De Cyon, 183–85. M. Raffalovich, however, credits the government with having known how "not to abuse the issue of paper money," and declares that "when the needs of commerce have required a greater quantity of monetary signs an issue has been made temporarily under the condition of a special guarantee."—*Le Marché Financier en 1893–94*, 140.

[1] *Bulletin de Statistique*, August, 1894, XXXVI., 183. The date here given, and most others in this chapter, are according to the Julian calendar, whose use still prevails in Russia, and are twelve days behind the Gregorian dates.

chant 600 roubles. The maximum term for loans for material is three years, but periodical payments are required when the term exceeds six months. The bank is authorized to accept as security for loans to small farmers, peasants, and mechanics, upon the pledge of their products, the guarantee of the provincial assemblies, institutions of credit (including mutual societies which agree to operate under the rules framed by the bank), and individuals chosen from among the inhabitants of the respective communities who inspire confidence at the bank.

This new policy of the bank has been subjected to severe criticism upon the ground that the Russian people are unused to operations of credit and cannot be trusted to meet in good faith the required payments. The Minister of Finance himself, in his report recommending the new system, referred to the collapses of most of the banks of commerce and of mutual credit which have taken place in Russia during the past twenty years and to the failure of two branches of the Bank of Russia at Kief and Kharkof, which were authorized to advance money to small farmers on the guarantee of two large proprietors and the certificate of the local tribunal that the property actually existed upon which the advance was made. More than 2,000,000 roubles were advanced annually in loans of this sort, but great abuses occurred and it was found that loans were obtained upon products which had no existence by means of false certificates given by the authorities.[1] The government has felt, however, that some losses could be borne in teaching the people the benefits of commerce and of credit and did not hesitate, during the famine of 1892 and the customs war with Germany in 1893, to advance to the suffering peasants some 90,000,000 roubles which were recovered only partially and by degrees.

The danger of loans upon products is increased, in the opinion of the critics of the bank, by the permission that the products on which loans are made may be retained in the

[1] De Cyon, 135–36.

hands of the producers and by the long terms for which the money is advanced. Long-term loans, in the absence of large deposits, can only be made by fresh issues of paper money and M. Witte made declarations in his report as to the effect of such issues strangely like the declarations of Mirabeau when the French *assignats* were authorized and of Secretary Chase when he was urging upon the American Congress the substitution of legal tender government paper for bank-notes.[1] "The value of these bills," says M. Witte, "issued exclusively for a useful object, will be maintained by the productiveness of labor, and the issue of such bills will not influence the quotations of the credit rouble, because in making these issues in a manner responding to the object in view the quantity of securities in circulation will be at the same time increased."

The government of Russia, however, has undertaken a comprehensive policy for the development of the resources and productive power of the country. It has been felt by those who shape this policy that the government should take the initiative in measures which in other countries would be left to private enterprise. This course has been adopted by Russian statesmen, not in ignorance of the laws of finance and political economy, but under the conviction that those laws would not come rapidly into operation to stimulate commercial and credit operations in an agricultural country without the example of the leadership of the state. This conviction is the keynote of the present policy of the Bank of Russia. The government is willing to take steps in making loans to producers which would not be taken by a private financial establishment, because it is willing to risk something of the national wealth for the sake of increasing it, and because the strong hand of the government can be appealed to for the purpose of punishing defaulting debtors. The issue of paper money, through the instrumentality of a great bank, is felt to be a necessary means for supplying the people with that ample supply of monetary signs which proved so

[1] *Vide* Ch. xv., p. 399.

beneficial to France after the great influx of gold from California and Australia and which has proved so beneficial to Scotland under her system of free banking. The government has not put in jeopardy the solvency of the bank by its agricultural loans, for the entire amount on December 16, 1895, was 27,466,804 credit roubles, and had been materially reduced in 1908.

The capital of the Bank of Russia was fixed by the new statutes at 50,000,000 roubles ($38,000,000), and the limit of the special reserve was increased from 3,000,000 roubles to 5,000,000 roubles. It was proposed at first to raise the new capital by setting aside annually ten per cent. of the profits, but this process was soon regarded as too slow and a decree of February 6, 1895, provided for taking the necessary amount from the surplus in the Imperial Treasury.[1] Losses by the bank are met from the reserves, and, in case of their exhaustion, are to be carried to the debit account of the Treasury. The management of the bank is entrusted to the Minister of Finance and the annual accounts are submitted to the Imperial Council.[2] The number of branches at the close of 1907 was 113.

The accounts of the Bank of Russia were stated in a similar manner to those of the Bank of England, in the separation of the issue from the banking department. The bills of credit are government notes for all practical purposes and the bank itself, even in its banking operations, is little more than a bureau of the Treasury. A circulation of 769,342,911 roubles was based upon government obligations and corresponded to the "authorized circulation" of the Bank of

[1] *Bulletin Russe de Statistique*, April, 1895, 200.

[2] M. Witte, the eminent Finance Minister, also created a board of Treasury officers known as the Council of the Bank and corresponding, according to his view, "to the similar councils in the central banks of Western Europe." These boards take the place of the Council of Imperial Institutions of Credit, created in 1817, which contained representatives of the nobility and of the business community, and the change is criticized by M. de Cyon on the ground that it has brought the bank entirely under official supervision with no external check.—*M. Witte et les Finances Russes*, 145.

England. Circulation beyond this sum was represented by the coin reserve of the bank and could be increased only by deposits of coin. The banking department was utilized for several years for swelling the paper issues in much the same manner as when the suspension of the bank act is authorized in England. These special issues consisted for the most part of the notes which the bank was ordered to call in and destroy by the ukase of 1881, but which were kept in reserve until special authority was given for their re-issue against new deposits of securities or transfers of gold to the cash reserves.[1] The government, by a ukase of December 9, 1894, abolished the distinction between the authorized permanent circulation and the temporary circulation charged against the banking department by transferring the temporary issues from the banking department to the issue department. The limit of authorized circulation without metallic cover was increased by this process from 568,513,000 roubles to 769,342,911 roubles, exclusive of about 285,000,000 roubles covered by gold. Both sides of the account of the banking department were diminished by the amount thus transferred, —200,829,455 roubles,—and by an additional sum of 65,433,-691 roubles transferred in gold from the banking to the issue department as the gold value of that part of the increased permanent issue not represented by securities.[2]

The total gold funds of the bank and the Treasury on January 1, 1895, were 645,731,000 roubles ($500,000,000). This sum was not all in actual gold held in Russia, the sum of 58,331,000 roubles representing foreign credits payable in gold on demand; but the Treasury alone had a gold fund of 194,410,000 roubles and the bank held 39,540,000 roubles in gold in its banking department, exclusive of that held against outstanding notes.[3] The funds then set aside to

[1] Lévy, 201–203.

[2] *Bulletin Russe de Statistique*, Jan.–Feb., 1895, 34–37.

[3] It is interesting to note that 28,654,937 roubles ($21,500,000) of these holdings was in American half-eagles, the largest amount of foreign coin held of a single kind except 38,117,580 roubles ($29,000,000) in English sovereigns.—*Bulletin Russe de Statistique*, March, 1895, 170.

cover the circulation were 351,939,000 roubles and the authorized circulation, covered and uncovered, was 1,121,282,000 roubles ($880,000,000). The government by a ukase of March 3, 1895, increased the metallic coverture for the circulation by transferring from the Treasury to the bank 98,061,276 roubles in exchange funds and substituting 1,125,682 in gold for an equal amount of silver in the bank reserves. This made the total gold funds held against circulation 375,000,000 roubles, exclusive of 75,000,000 held against a special issue, and made the metallic coverture more than a third of the outstanding bills.

The monetary reform in Russia which was practically achieved by the autumn of 1897 presents one of the most interesting and important of modern financial operations. Previous failures and several difficult factors in the problem imposed upon Count Witte, with whose name the reform will be permanently linked, a policy of caution and complete preparation. Three of the important questions involved were at what rate the value of the paper rouble should be fixed, whether the metallic standard should be changed from silver to gold, and where the resources should be obtained to give stability and permanence to the new system.

Upon the question of the rate of conversion of the paper, there were those who contended that, in Russia, as in the United States after the Civil War, the old metallic unit should be restored in its integrity. Against this contention, however, were arrayed the views of those who believed in consecrating by law the *status quo*, in order to prevent violent changes in prices of commodities and adverse effects upon the export trade of the country. While there had been periods, as recently as up to the war with Turkey in 1877, when the credit rouble had been at a quotation as high as 3.40 francs (par being 4.00 francs), the quotation had fallen during and after the war considerably below 2.66 and for a time in 1888 even below 2.00 francs.[1] These years had

[1] Leroy-Beaulieu, *La Science des Finances*, II., 750.

represented, however, a period of wide fluctuations. The salient fact upon which the advocates of resumption at the current value of the rouble rested their case was that since 1891 "the rouble had acquired a stability more and more marked and a fixity of value which was a benefit both to the country itself and to those who were called upon to do business with it."[1] In the language of a semi-official publication[2]:

> In fine, the credit rouble is equal to a fixed quantity of fine gold, almost identical with the amount which one has been able, on the average of the last twenty years and during the last three years, to procure with this same rouble. The fixed exchange at which the Bank of Russia buys and sells gold over its counter causes no disturbance to contracts, old or recent, formal or tacit; it does not modify established customs, the price of rents, the nominal or the real amount of wages. Mortgage creditors and debtors, holders of the public funds issued in credit roubles, functionaries and employees, and all others, give and receive paper roubles at par, and these roubles are worth to-day that which, on the average, they were worth from 1876 to 1895, from 1879 to 1881, from 1893 to 1896.

Already, as early as 1887, Vichnegradsky, the great finance minister who paved the way for the later successes of Count Witte, had declared that the eventual rate of conversion for the paper rouble would be two-thirds of its nominal value and had planned to strengthen exchange funds and end the régime of irredeemable paper.[3] By the autumn of 1892 Count Witte was preparing to bring to an end speculation in the paper rouble in the Berlin market. He gave notice in January, 1893, to banking institutions doing business in Russia that aid lent by them to speculative operations in the rouble would be considered as incompatible with their privileges. In the autumn of the next year, when the comparative stability of the paper had been disturbed temporarily by unfavorable reports regarding the health of the Russian Emperor, Count Witte went resolutely into the market, purchased the "short" contracts offered by speculators for the

[1] Raffalovich, *Les Méthodes pour Revenir à la Bonne Monnaie*, 20.
[2] *Bulletin Russe de Statistique*, March–April, 1896, III., 177.
[3] Lorini, 118.

decline, and forced them to settle on his own terms.[1] With a great fund of gold at his command, it became possible also to adopt the means of regulating paper and silver currencies which has proved so effective in solvent countries in recent years—the sale of foreign exchange. As early as the autumn of 1892 the Department of Finance offered to buy exchange on Berlin at 2.18 marks and to sell at 2.20, shutting fluctuations, while this policy could be maintained, within the narrow limits of normal gold points.[2]

The argument for fixing the new gold unit at the current gold value of the paper rouble was strengthened by the fact that the metallic standard of the Empire had been, not gold, but silver. Neither metal was in circulation when Count Witte projected his reforms, but with his usual foresight he realized that gold was the proper standard for a modern commercial state surrounded by gold-standard countries. The adoption of gold, however, was a radical departure from old Russian legislation, so that it could not be properly contended that the government was under a legal obligation to raise the paper rouble to a parity with gold at its old ratio to silver. The law of 1842 had decreed that "the principal monetary unit, legal and invariable, of all the moneys having circulation in the country shall continue to be the silver rouble."[3] It was in September, 1876, that de Reutern, the Minister of Finance of the day, suspended the free coinage of silver, and on the 10th of November following that he required customs dues to be paid in gold; but the definite adoption of the gold standard awaited the completion of the monetary reform in 1897.

That the gold standard could be established and main-

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[1] *Vide* the author's *Principles of Money and Banking*, II., 363–64.

[2] Lorini, 82.

[3] Lorini, 37. This writer calculates that, at the price of silver in 1897, redemption of a credit rouble in full in silver would have given to the holder 1.97 francs in gold value instead of the sum of 2.67 francs actually given by the monetary reform.—*La Réforme Monétaire de la Russie*, 111.

tained, in a country with so limited an economic power as Russia, only by accumulating large gold resources, is indicated by the facts already set forth regarding the gold funds of the bank and the Treasury. Careful consideration was also given to the foreign-trade movement, the production of gold in Russia, and the balance of payments on account of financial operations. Substantially, the gold standard was established by means of borrowed capital, but so skilfully was the public credit built up that by the conversion of old loans at lower rates the use of a thousand millions of dollars was obtained from French and other foreign lenders practically without increase in interest charges.[1]

The foundations having thus been laid deep and broad, the gold standard was put into actual operation with marvellous rapidity. In 1895 an ukase of May 8th declared that written contracts might be made payable in Russian gold roubles and that such contracts might be settled in gold or in credit roubles of equivalent gold value at the rate of exchange prevailing at the date of payment. Public depositaries were authorized to receive gold at its exchange value in the payment of excises under regulations framed by the Minister of Finance. Other steps which followed during the summer authorized the bank to receive deposits of gold coin and bullion, foreign bank-notes, and commercial bills payable in gold and to issue certificates therefor payable in gold on demand. These certificates were receivable as the equivalent of gold at the Treasury and the bank, but were not a legal substitute for gold between individuals except with the consent of the creditor. They were receivable at branches of the bank for gold obligations due at other branches and exchange was furnished free except for the cost of telegraphic service.[2] These important acts were followed on July 26,

[1] The debt increased from 11,619,434,008 francs on Jan. 1, 1887, to 16,567,830,000 francs on Jan. 1, 1900.—*Fonds d'État Russes et Autres Valeurs Mobilières Crée en Russie*, 31, 64.

[2] *Bulletin Russe de Statistique*, July-August, 1895, II., 26.

1895, by the promulgation of rules permitting the creation of special gold accounts at the bank, for the reception of gold and gold certificates, and the issue of check-books representing payments exclusively in gold. The public were thus being gradually prepared, by the flow of a stream of gold through the Treasury and the banks, for the establishment of gold payments and the maintenance of a fixed relation between the credit rouble and the metallic standard.

This relation was definitely established in 1896 at three roubles of the new standard for two of the old, or at the ratio of two-thirds of the old gold rouble of four francs ($0.772) for one rouble of the new standard, which thus had a value of 2.67 francs ($0.515). A complete project for a new coinage system upon this basis was submitted by Count Witte to the Imperial Council, March 21, 1896, and was the basis of the ukase of August 8th, which provided that the paper rouble should be received by the railways, public offices, and the bank at the new rate until January 1, 1898.[1] These measures, positive though they were, were looked upon in certain quarters as only a provisional fixing of the rate of exchange, and there was still discussion as to whether the rate should be given permanence by the issue of new coins and by the offer to redeem paper roubles in the new coins at the bank.

Count Witte, in his annual estimates for 1897, reminded the Emperor that in view of what had already been done, "legislative sanction will add nothing to the dangers, now much exaggerated, which are attributed to the resumption of payments in specie, already accomplished in fact." On the contrary, he declared, so far as demands for redemption depended on confidence in the performance of the reform, the adoption by law of the fundamental principles of a sound circulation would tend only to diminish the risks of the reform, if any existed, and to strengthen to a higher degree the credit of Russia.[2] These resolute views bore fruit in the ukase of January 3, 1897, which provided for the issue of

[1] Lorini, 100.

[2] *Bulletin Russe de Statistique*, 1896, III., 737.

the old gold coins of the Empire at their former weight and fineness, but with designations making the old imperial equal to fifteen roubles of the new standard instead of ten. A coin of five roubles was provided for by an ukase of November 14, 1897, but it was not until December 11, 1898, that the gold piece of ten roubles was authorized, which soon superseded the older pieces and became the standard gold coin of the country.[1] The new coinage policy was codified and confirmed by the law of June 7, 1899, which declared, "The monetary system of Russia is based on gold."[2]

On the part of the bank, provision was made to recognize by law its obligation to redeem its notes in gold. The statutes were modified by ukase of August 29, 1897, so that the English system of separating the issue department from commercial operations was abandoned and the accounts fused into a general balance-sheet. The authorized "uncovered" issue was reduced to 600,000,000 roubles ($309,000,000) and of this amount one-half must be covered by gold; issues in excess could be made only for gold. It was declared, moreover, that issues should be kept within limits rigorously determined by the actual needs of the money market.[3] Already the bank held more gold than the volume of notes outstanding,[4] and it involved no risk to follow the suggestion of Count Witte and announce readiness to pay gold on demand. This was done by the ukase of November 14, 1897,

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[1] *Bulletin Russe de Statistique*, 1901, VIII., 164. The text of some of these acts is given in English by Willis, *Sound Currency*, July, 1899, VI., 106–108; in French by Lorini, *La Réforme Monétaire de la Russie*, 175–183.

[2] *Le Marché Financier en 1899–1900*, 794.

[3] *Bulletin Russe de Statistique*, 1897, IV., 467

[4] Beaufort sets forth in detail how special deposits of gold by the Treasury were carried to the general assets of the bank, gold holdings in old roubles were advanced in nominal value fifty per cent. in new roubles, and other readjustments brought up the total gold resources of the bank on September 1, 1897, to 1,131,700,000 roubles against outstanding notes to the amount of 1,068,778,000 roubles.—*L'Achèvement et l'Application de la Réforme Monétaire de la Russie*, 32–35.

which provided for inscriptions on the notes to the effect that the bank would redeem them in gold coin without limitation as to amount, that redemption was guaranteed by all the resources of the state, and that the notes should be received at par throughout the Empire.

These measures were not taken without misgivings, both at home and abroad, as to the possession of sufficient economic power by Russia to retain her laboriously accumulated gold funds in the face of adverse conditions of trade or foreign war. But these factors had been anticipated and measured by Count Witte. In his report on the budget of 1898, he discussed the conditions necessary to the success of the reform and did not fail to include among them the maintenance of equilibrium in the budget and good faith by Russia toward her foreign creditors. Evidence of the latter had been given in the most explicit terms by an order of the Emperor, issued in connection with the law of January 3, 1897, which declared that, in the payment of engagements previously contracted in gold roubles, the coins should continue to rank only at their old face value, instead of at the new value one-half higher.[1] Proof of the determination to separate the affairs of the bank finally and absolutely from those of the public Treasury was afforded, on the morrow of the crisis of 1899, by an ukase which directed that the last 50,000,000 roubles of the State debt to the bank on account of the paper issues be cancelled from the free cash balance of the Treasury and that the issue of bills of credit should never again serve as an auxiliary resource in the public finances.[2]

To both the tests of financial troubles at home and serious war in the East, the Russian monetary system was subjected within seven years after it was fairly put in operation in 1897, and both tests it met without disaster. The scarcity of capital which afflicted Europe in 1899 reacted seriously upon

[1] By a semi-official interpretation this rule was extended to engagements contracted in "metallic roubles."— *Bulletin Russe de Statistique*, Nov.–Dec., 1896, III., 740.

[2] Raffalovich, *Le Marché Financier en 1899–1900*, 810.

Russia because so many of her enterprises were fed with capital from abroad. As usual under such conditions, the clamor arose for "more money" and for a freer use of the facilities of the Bank of Russia. It became necessary for Count Witte to submit a memorial to the Emperor, showing that the quantity of currency in the country was greater than ever before and that if the bank had thought it advisable to raise its discount rate it was only taking the same precaution as other state banks and had not been exempt from this necessity even under the régime of paper money.[1] The condition of the bank and the stability of the gold standard remained absolutely unshaken. Discounts and advances were increased by nearly fifty per cent. in October, 1899, at the height of the crisis, as compared with the previous year. The circulation and gold reserves declined somewhat, but this was the result of the policy of the government in forcing gold coin into actual use. From October 1, 1897, to October 1, 1899, gold in circulation had risen from 107,000,000 to 662,300,000 roubles, while bank-notes had fallen from 986,600,000 to 555,000,000 roubles. While within the year 1899 the gold resources of the bank fell by about 115,000,000 roubles, its outstanding note obligations fell by 171,000,000 roubles and its gold resources remained at the close of the year at 730,000,000 roubles ($375,950,000).

A more serious test of the stability of the monetary system came with the Russo-Japanese War in 1904. Disaster after disaster came to Russian arms on land and sea, but they never threatened the solidity of the structure built up by Count Witte in time of peace. It was the policy of the Russian Government from the outset to suffer no infraction of the gold resources of the bank and to support the expenses of the war by the issue of interest-bearing securities rather than by resort to paper money.[2] The close of the year 1903 found the bank in much the same position in respect to re-

[1] Raffalovich, *Le Marché Financier en 1899–1900*, 442–448.

[2] *Cf.* Cahen, in *Questions Monétaires Contemporaines*, 557.

serves and circulation as at the close of 1899. The total gold resources of the Treasury and of the bank were 1,058,500,000 roubles, of which 732,900,000 roubles ($376,500,000) was in the vaults of the bank and 169,100,000 roubles ($87,000,000) in foreign bills, making the gold funds of the bank 902,000,000 roubles. As the outstanding circulation was then only 578,700,000 roubles, the notes were covered in the ratio of 156 per cent. by gold, and further paper issues would have been well within the limit of safety.[1] The Treasury, moreover, instead of being debtor to the bank, as in most European states, was a creditor to the amount of a free balance of 635,000,000 roubles.

If there was any doubt of the purpose of the Russian Government to adhere resolutely to a sound financial policy, it was set at rest by an official communication, appearing in the *Official Messenger* of May 13, 1904, which declared that "However seductive it might appear at first glance to make head against all the expenses of the war with the sole resources afforded by the normal elasticity of the circulation, the Ministry of Finance did not think proper to employ this method." A conference of the Committee of Finance definitely considered the proposal to suspend specie payments, as the Bank of France had done in 1870, in order to husband its gold, but decided that such a step would be unnecessary and harmful.[2]

Commercial credit showed some signs of disturbance at the prospect of war, and the fact that the monetary system had not yet been tested led to purchases of foreign bills in order to transfer capital abroad. Exchange on London rose in January, 1904, to ninety-five roubles (for £10), but offerings of bills soon exceeded the demand and the rate fell in December to 94.45 roubles.[3] The bank co-operated with the

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[1] Helfferich, *Les Finances des Belligérants*, 81.

[2] *Le Marché Financier en 1904–05*, 926.

[3] *Le Marché Financier en 1904–05*, 929. The latter rate is close to the theoretical par, which is 94.5758.

Treasury to prevent exports of gold from Russia. The government decided to place loans abroad rather than at home, in order to pay for war supplies obtained in foreign countries. The balance of trade thus created against Russia was met by drafts upon the funds arising from the war loans in London, Paris, and Berlin and by the free sale by the bank of drafts against its foreign balances. From January 1 to May 16, 1904, the gold balances of the bank abroad fell from 169,100,000 roubles to 39,900,000 roubles ($20,540,000).[1]

The Bank of Russia raised its discount rate early in 1904 from four and a half to five and a half per cent., but announced that, without encouraging speculation, it would extend generous accommodation to solvent borrowers and would re-discount freely for the private banks. Its own discounts rose from 431,900,000 roubles on November 23, 1903, to 472,700,000 roubles on January 1, 1904; but this increase was not much more than usually occurred in the beginning of the year and was offset by a decline to 400,600,000 roubles on November 23, 1904. The discounts of the private and joint-stock banks increased from 897,000,000 roubles in August, 1903, to 1,011,000,000 roubles in January, 1904, but fell back in August, 1904, to 962,000,000 roubles.

Some additional issues of notes were ultimately made during the war, but they were chiefly for the two objects of affording a convenient medium of circulation in Manchuria and of drawing gold from circulation into the coffers of the bank. The total increase in circulation during 1904 was 270,000,000 roubles, but this was largely offset by an increase of 181,000,000 roubles in the gold resources of the bank and an estimated decrease of 103,700,000 roubles in gold in circulation. Conditions in Manchuria were peculiar, in that the surrounding countries were not upon a gold basis. Silver was the money in general use, but passed by weight rather than by the nominal value of the coins. The Russian Government found it advisable, therefore, to accumulate a

[1] Helfferich, 89.

bullion fund, in which rouble notes of small denominations were redeemed, and to issue a considerable amount of such notes while large military forces were maintained in Manchuria.[1] In Russia itself the preference for paper over gold which was the result of the long régime of paper money had not been outgrown and made it easy for the bank to conform to this preference without impairing confidence in the stability of the monetary standard.[2]

The crisis of 1899 led to several changes in the charter of the State bank, designed to aid the private banks. The term of commercial paper which might be accepted by the State bank for re-discount was extended from three to eight months and the privilege of re-discount was extended to the private banks on loans on securities which were not acceptable directly by the State bank, on the conditions that the rate of discount should be ten per cent. and that the risk should be divided between the two institutions.[3]

A general view of the accounts of the Bank of Russia for representative years appears in the table below. The small amount of the gold resources of the bank in earlier years is explained by the fact that much of the gold in the country was held by the Treasury, until the plans for resuming gold payments were put in operation which have been described. The gold includes in most cases deposits by the bank in foreign countries. The decline in gold resources after 1898 was due to the entry of gold into circulation in lieu of notes retired, and a true view of the money in circulation would include this gold. The deposits as reported include government deposits of all types, which make up by far the largest proportion of the total. Thus, on January 5, 1908, Treasury deposits were 433,740,000 roubles. There are several strong commercial banks, which do much of the discount business under ordinary conditions.

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[1] *Le Marché Financier en 1904–05*, 932.

[2] Helfferich, 103.

[3] *Le Marché Financier en 1899–1900*, 462.

Balance Sheet of the Bank of Russia.

JANUARY 1.	CIRCULATION.	GOLD RESOURCES.	LOANS AND DISCOUNTS.	DEPOSITS AND CURRENT ACCOUNTS.
	(In millions of roubles.)			
1880	1129.9	151.0	264.1	249.2
1885	899.7	170.3	222.1	357.4
1890	928.4	210.3	256.0	375.6
1892	1054.8	285.3	214.4	374.9
1894	1071.9	360.3	293.9	441.2
1895	1121.2	350.8	357.5	557.4
1896	1055.2	391.7	404.7	532.7
1898	901.2	1180.7	270.5	644.7
1900	491.1	838.6	388.2	748.9
1902	542.1	709.2	513.5	698.0
1903	553.8	763.2	478.9	674.6
1904	604.1	899.5	472.7	789.7
1905	856.0	1024.2	401.6	626.4
1906	1204.6	919.5	665.5	520.2
1907	1233.7	1000.0	520.3	512.4
1908	1168.0	950.7	495.1	596.2

The Bank of Finland.

The Bank of Finland is an outgrowth of the Diet of Bôrge in 1809, which regulated the relations of Finland with Russia. Swedish notes continued to circulate for a long time in Finland, in spite of determined efforts to supersede them by Russian silver and paper.[1] The bank was not conspicuously successful at first, but was able in 1840 to undertake the redemption of its notes in silver, as was done at the same time by the Bank of Russia. The unusual requirement

[1] Frederiksen, 185. This author adds: "The continuous decrease in the value of Swedish notes consequent upon too large an issue contributed rather to spread them in the interior of Finland. The merchants, who received more of these debased notes for the same quantity of merchandise, made large profits by placing the notes with their customers, who only understood later that they were steadily decreasing in value. As is always the case when money is decreasing in value, the lower classes and the remoter districts of the country were the chief sufferers."—*Finland; its Public and Private Economy*, 186.

that it should also redeem Russian notes made the bank a victim of the vicissitudes of Russian finance and was the moving cause of a demand, after the crisis of 1857, for a separate coinage unit in Finland. This was granted by the Russian Emperor by a decree of April 4, 1860. The new unit, the *markka*, had the merit of being at once the equivalent of the French franc and one-fourth the nominal gold value of the Russian rouble. The depreciation of silver after 1866 caused the same disorder in Finland as elsewhere and led to the adoption by decree of August 9, 1877, of a gold-standard law and the suspension of free coinage of silver.

The statutes of the bank were reformed in 1867 upon the model of those of the Royal Bank of Sweden. The bank is the property of the state and its profits go into the Treasury. The Estates choose four delegates and four auditors and exercise by other means control over the general policy of the bank. The capital is 25,000,000 marks ($4,825,000) with a reserve of 31,739,855 marks. The limit of authorized or uncovered circulation is 40,000,000 marks, to which 10,000,000 marks may be added, by consent of the government, to meet emergencies. For any excess above these amounts, the bank must hold either gold, foreign bills, credits with correspondents abroad, or bonds of a class readily marketable on foreign bourses. Deposits payable on demand must be covered in the same manner as notes, and the amount of actual gold must not be less than 20,000,000 marks.[1]

Preparations for the introduction of the Russian monetary system into Finland were indicated by a decree of May 27, 1904, making Russian gold full legal tender; but Finnish money remained for the time being legal tender alongside the Russian and no immediate requirement in regard to Russian money was imposed upon the bank.[2] The circulation of the bank at the close of 1907 was 95,026,745 marks ($18,340,000) and its assets, which reached a total of

[1] Frederiksen, 196.

[2] *Bulletin de Statistique*, September, 1904, LVI., 332.

201,153,187 marks, included 25,392,732 marks in gold, 54,655,880 marks in Finnish commercial paper, 29,134,794 marks in advances on securities, and 57,903,196 marks on deposit abroad.[1]

[1] *Économiste Européen*, April 3, 1908, XXXIII., 445.

CHAPTER XI.

THE BANKS OF NORTHERN EUROPE.

Development of Banks of Issue in Belgium—The Strain Put upon the National Bank by the Franco-Prussian War—Difficulties Caused by the Double Standard—The Bank of Amsterdam and Modern Banking in Holland—Organization of the Banks of Sweden, Norway, and Denmark.

THE history of banking in Belgium is a history of greater freedom from state interference and entanglement with the finances of the government than that of most other European countries. Belgium began her present national life in 1830 with the assumption of but a small debt as a legacy from her relations with Holland and with the field comparatively clear for the adoption of a sound system of currency and banking. The neutrality of Belgium is practically guaranteed by the great powers of Europe and her military expenditure scarcely exceeds one dollar per capita. The National Bank of Belgium has been employed by the government, therefore, simply as its financial agent in its ordinary transactions and has not been diverted from its duties to industry and commerce by the necessity of floating large loans or covering deficits in the public finances. The government under these conditions has been able to keep in its own hands the ultimate power over the bank, without being often tempted to abuse it, and reserved in the first charter the right to grant to other corporations the power to issue notes. The National Bank has a monopoly of note issue in fact, but is restrained in some measure from abuse of its power by the knowledge that a competitor may at any moment be legally authorized to enter the field.

Monopoly of note issue has existed in Belgium only since 1850. The oldest institution issuing bank-notes was the General Society for the Promotion of National Industry (*Société Générale pour favoriser l'industrie Nationale*). This society was founded in 1822 principally as a bank of circulation and discounts, but it became little by little a great institution of finance interested in promoting investments.[1] The society was a depository of public funds and of large private savings, loaned money on mortgages, on public securities, and on merchandise and was interested as promoter and financial agent in nearly all the large enterprises of the country. It had no strong rival until after the separation of Belgium and Holland and it invited rivalry then by its own shortsightedness. The society and its management were largely under Dutch influence and when the new government of Belgium sought the assistance of the bank as a public depositary the managers refused to make any arrangements which would subject them to the public accounting officers. They regarded the services of the bank as indispensable and forced the government to countenance the creation of a new banking institution more friendly in its character.

The Bank of Belgium was founded February 24, 1835, and the management of the public funds was taken away from the old institution and given to the new. The methods of the new bank had the same defects as those of the old, however, in attempting to make long time loans on commercial paper, while issuing circulating notes payable on demand. The result was a crisis in 1838, when confidence was impaired by the fear of war over the provinces of Limbourg and Luxembourg. There was a violent contraction of credit at Brussels, and the Bank of Belgium found itself without cash to meet its obligations. The older institution, which was somewhat stronger, and was not regarded as so largely a creature of the existing government, took advantage of the opportunity to crush its rival and on December 4, 1838,

[1] Courcelle-Seneuil, 339.

presented 1,000,000 francs ($200,000) to the Bank of Belgium for redemption. They followed this up on December 10th, by the presentation of 1,200,000 francs and on December 15th, by the presentation of 300,000 francs more. The bank was forced to suspend and to appeal to the government for assistance. A loan of 4,000,000 francs ($800,000) was voted, of which 2,600,000 francs were applied to the payment of bills and commercial obligations of the bank, and 1,400,000 francs to meeting the demands of depositors in the savings branches which had been established.[1]

The manner in which the existing institutions mixed up the business of banks of issue and deposit with that of operations for long terms created a strong feeling in favor of a bank devoted exclusively to commercial banking. The Bank of Belgium was again embarrassed in 1842 and was compelled to surrender the privilege of keeping the public monies. An arrangement was entered into between the Treasury and the *Société Générale*, but that institution felt the effect of the crisis of 1842 and was compelled to abandon all the branches which it had established except that at Antwerp. The government, therefore, in view of the necessity for an institution of a different character, in granting a renewal of the charter of the *Société Générale* for twenty-five years, in 1843, reserved the right to revise and restrict its powers before the end of the year 1849. The crisis following the political excitement of 1848 compelled both existing banks to suspend specie payments and afforded the government the best of excuses for curtailing their privileges. The banks were aided for the moment by an act of March 20, 1848, giving forced legal tender character to their bills but confining the issues within fixed limits. The year 1849 had hardly begun, however, when the President of the Council of Ministers, M. Frère-Orban, brought forward a plan for the National Bank of Belgium (*Banque Nationale de Belgique*). The charter of the bank was granted by the law of May 5, 1850, fixing the capital at 25,000,000 francs ($5,000,-

[1] Noel, I., 549.

000), divided into shares of 1,000 francs each, and giving the bank its franchise for twenty-five years. The bank was forbidden to borrow or make loans upon mortgages, or upon deposits of industrial stock, and was forbidden to take part directly or indirectly in industrial enterprises. The administration of the bank was intrusted to a governor appointed by the King for five years and six directors chosen by the shareholders, and a government commissioner was charged with the supervision of discounts and the issuing of bills.

The National Bank found itself face to face with strong competitors in the two older banking institutions, but gradually gained in strength and credit up to 1870, when it was subjected to one of the severest tests ever put upon a banking institution. It was not distrust of the bank, but the political events accompanying the Franco-Prussian War which caused the stress. The demand for banking accommodation was greatly increased by the necessity of furnishing supplies for the hostile armies and many business transactions were transferred to Belgium which would ordinarily have been carried on in France or Germany. This was an evidence of confidence in the bank which would not have been without its benefits if the institution had been prepared for so sudden an enlargement of its transactions, but this indication of confidence from without was offset by a degree of distrust at home which led to the presentation of large quantities of bank bills for redemption in coin. The government added to the dangers of the situation by a policy which tended to embarrass the bank and to increase the uneasiness of the public.

The administration feared that a declaration of war between France and Germany would lead to the violation of the neutrality of Belgium, and directed the National Bank to take measures to transfer the metallic reserve, representing the balance due the Treasury, to the port of Antwerp. The bank was informed on July 13th that this transfer must be effected without delay. An attempt was made to carry out the movement secretly, but the news became public that the metallic reserve had been removed from Brussels and

caused great popular alarm. The government, instead of sustaining the bank, issued two more stupid orders,—one to the agents of the Finance Department in the provinces, not to permit their cash to be exchanged for bank bills, and the other to the chiefs of the military forces, to exchange bank bills in their military chests for coin.[1] Notwithstanding this apparently deliberate effort to discredit the bank, the government refused to permit the suspension of specie payments and held the institution strictly to the performance of the obligations of its charter. The orders regarding the public funds and the military chests were so palpably unwise that they were quickly revoked, and an order was given to pay everything in bank bills which could be so paid, and to exchange large bills at the agencies of the banks for small ones, in order to facilitate payments in bills.

The discounts of the bank increased from 177,500,000 francs on July 10, 1870, to 203,923,100 francs on July 20th, and to 223,231,744 francs on July 31st. While assistance was thus rendered to commercial credit, the presentation of notes for redemption rose from a daily average of 600,000 francs ($120,000) during 1869 to a daily average of over 1,000,000 francs ($200,000) during the eighty-two days from July 1st to September 20, 1870. The amount presented on July 20th was 6,282,000 francs ($1,250,000) and on the next day 7,025,000 francs ($1,400,000), and the daily average from July 15th to July 30th was 2,094,000 francs ($415,000). The bank was able to meet these demands by appeals for loans of coin from London, Amsterdam, Hamburg, and Paris, and by realizing the bills drawn on foreign countries which it had in its possession.[2] These bills, which amounted

[1] Noel, I., 486.

[2] The large holding of foreign bills, chiefly drawn on London, in the cash reserves of European banks is, "to a very large extent, solely for the sake of the interest which is to be made on them. Bills on England, owing to the high rate of interest which they often bear, as compared with continental rates, are a favorite investment abroad. In Paris, Berlin, Frankfort, Hamburg, and other conti-

at the outbreak of the crisis to 64,144,561 francs, were reduced on July 31st to 7,227,333 francs. The proceeds were employed in the purchase of bullion, principally in silver, which the mint rapidly coined into crowns. The bank was thus enabled to meet every demand and to reduce the rate of discount as soon as the crisis was over. The rate of July 15th was two and a half per cent., but this was increased to five per cent. between July 15th and August 5th, and to six per cent. from August 5th to August 27th, and even to seven per cent. for bills drawn in foreign countries on Belgium. The 27th of August saw the worst of the crisis over, and the domestic rate fell to five and a half per cent.; on September 20th to four and a half per cent.; and on October 8th to three and a half per cent.

Belgium was led to propose the formation of the Latin Union in 1865 because of the difficulty of maintaining the double standard under the oscillations in the price of gold and silver. The French system of decimal coinage was adopted by the law of June 5, 1832, but silver was made the standard and no provision was made for gold coinage. The creation of a gold circulation in France after the great gold discoveries led to a popular demand for the admission of French gold coins into Belgium. This was decreed by the law of June 4, 1861, and the result was to drive the silver five-franc pieces out of sight and change the standard of actual circulation from silver to gold. The National Bank had a reserve at that time of 48,645,000 francs in silver five-franc pieces, which was paid out to meet current demands, but this fund declined by November 8, 1862, to 14,629,000 francs, and the bank suspended their further issue.[1] The smaller pieces continued to disappear, but the movement was retarded for a time by the suspension of specie pay-

nental cities, the bills on England held by the bankers and joint stock companies often amount to many millions sterling; and a very large sum remains in their hands for several months,—in fact, from the time when the bills are drawn to the time when they fall due."—Goschen, *Foreign Exchanges*, 138.

[1] Shaw, 191.

ments in the United States. The drain set in again in 1865, the small silver pieces became so scarce that they could not be supplied by the bank in sufficient sums to meet the demands of manufacturers, and the government was compelled to resort to the coinage of nickel pieces. The Belgian delegates urged the adoption of the gold standard at the conference which resulted in the formation of the Latin Union, but consented to the convention finally adopted by the other powers.

The fall in the value of silver after 1867 dragged Belgium into new difficulties, against which the convention of the Latin Union afforded her no protection. The government was authorized by the law of December 18, 1873, to suspend the minting of silver five-franc pieces, which had been going on at the rate of 300,000 francs a day. The coinage of silver had already exceeded domestic needs, and great quantities drifted across the French frontier and found their way into the Bank of France. This circumstance was made the occasion of a demand at the conference of 1885 that the countries of the Union take back their national coins and pay for them in gold. The Belgian delegate, M. Pirmez, at first refused to consider any such proposition, declared that Belgium was being made the victim of the misfortunes of the Union, and absented himself from the sittings of the conference. He declared that the treaty of 1865 made no reference to any such process of liquidation; that the acceptance of Belgian coins by French citizens had not been a part of the treaty, but a result of voluntary action; and that the dissolution of the treaty would simply relieve public depositaries from further acceptance of foreign coins, without imposing any obligations upon their issuers to redeem them.[1] The fear that the collapse of the Latin Union would imperil the gold standard in Belgium finally prevailed, however, over other arguments, and Belgium consented to a basis of liquidation by which each country was to pay in gold for one-half of its five-franc pieces returned

[1] Ansiaux, 14.

to it and was allowed to leave the other half to be returned by the play of foreign exchange.[1]

The position of Belgium and of the National Bank will be peculiarly embarrassing if the dissolution of the Latin Union destroys the legal status of the silver coins of one country in the others. Belgian coins would under such circumstances flow rapidly back into Belgium and would be likely to glut the reserves of the bank and make difficult the maintenance of the gold standard. The metallic reserve of the bank averages about 100,000,000 francs, of which only a fourth is now in silver, but the volume of Belgian five-franc pieces outstanding is estimated at 400,000,000 francs, of which about 200,000,000 are in the Bank of France, besides those in active circulation in France.[2] A glut of silver in Belgium would have the tendency to draw gold from the National Bank, while there would be the strongest disposition in the bank to retain gold and force silver into circulation. It would put a severe test upon the credit of the bank and its 800,000,000 francs of paper circulation to attempt to enforce the policy of the Bank of France, to redeem in silver at discretion, and the pressure for gold for export would be strong because of the redundancy of the monetary circulation which the glut of silver would cause. The heroic policy of buying gold and selling silver for what it will bring in the bullion market is favored by some Belgian statesmen and may prove the only effective means of maintaining the gold standard.

The renewal of the charter of the National Bank which was enacted in 1872 extended the life of the institution to

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[1] M. Haupt considers France rather than Belgium the victim in this transaction and regrets that her delegates, after securing the consent of the delegates of Italy, Switzerland, and Greece to liquidation in full in gold, yielded to their demand that they have the same privilege as Belgium of liquidating in gold to the extent of only one-half their silver coins accumulating in French hands.—*The Monetary Question in 1892*, 90.

[2] Haupt, 93.

January 1, 1903, and the capital was increased to 50,000,000 francs ($10,000,000). Several changes were made in the previous laws regarding taxation, the handling of the public funds, and the share of the government in the profits of the bank. Greater precision was introduced into the provisions regarding the proportion of specie held, which is now required to be one-third of the notes in circulation and of other demand liabilities. This reserve may be trenched upon in emergencies with the consent of the Minister of Finance. The notes of the bank were made a legal tender by the law of June 20, 1873, but only so long as they are redeemed in coin on demand and are receivable in public depositaries. Their acceptance by public depositaries is defined by law, but may be suspended by the Minister of Finance. A portion of the public funds in the custody of the bank is allowed to be loaned, but the profits earned go to the credit of the Treasury.

In the revision of the charter in 1900 the tendencies toward State socialism which had become strong in Belgium had free play. The privileges of the bank were indeed extended to January 1, 1929, but only under provisions which turned over a large part of its profits to the public Treasury. Under the extension of the charter in 1872 the bank was required to pay a patent tax on the gross volume of business, a stamp tax on its notes, and a tax of one-quarter of one per cent. semi-annually on the excess of the circulation above 275,000,000 francs. These provisions were continued by the law of March 26, 1900. The other principal taxes levied by the law of 1872 were one-quarter of the net profits of the bank above six per cent. and on discounts the entire excess of receipts above a rate of five per cent.[1] These two limits were radically changed in 1900. Henceforth one-quarter of the profits was to go to the State after four per cent. had been distributed to the shareholders and all profits obtained from a discount rate above three and a half per cent. were to find their way into the public Treasury.[2] Under these provisions

[1] Noel, I., 563.

[2] *Bulletin de Statistique*, April, 1900, XLVII., 422.

the payments to the State in 1907 reached 12,721,111 francs ($2,455,000) which was more than twice the cost of administration (4,887,954 francs) and exceeded by about fifty per cent. the 8,300,000 francs distributed to shareholders.[1]

The collections from the excess of discount rates above three and a half per cent. were 7,002,541 francs ($1,350,000) in 1907 and were probably larger than was anticipated when the law of 1900 was enacted. Discount rates had then been low for many years throughout Europe. For the entire period from 1851 to the close of 1900 the rate was at three per cent. or less during 10,623 days out of 18,262, and was only once (in 1873) as high as seven per cent.[2] But the scarcity of capital throughout the world during the opening decade of the twentieth century did not leave Belgium untouched. The rate of discount at Brussels was lower than elsewhere, except at Paris, and in 1904 was maintained uniformly at three per cent. ; but was raised on October 30, 1905, to four per cent., and in 1906 was subjected to four changes. Even under this pressure the average rate for 1905 was only 3.18 per cent. and for 1906 3.84 per cent., the amount collected from the tax on the excess discount rate in the former year being only 471,269 francs. It became necessary, however, under the troublous conditions of 1907, to advance the rate on March 18th to five per cent. ; on November 2d to five and a half per cent. ; and six days later to six per cent., carrying the average rate for 1907 to 4.95 per cent. Reductions of the rate were made early in 1908, until at the close of March it was at three and a half per cent.

As was pointed out by the censors, in their annual report for 1907, these high rates were necessary for the protection of the cash resources of the bank and could not be attributed in any way to selfish interest on the part of the directors, because of the provision attributing absolutely to the public Treasury the proceeds of discount above three and a half per

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[1] *Assemblée Générale des Actionnaires du 24 Fevrier*, 1908.

[2] Palgrave, 185.

cent.[1] The advantage of a higher rate than prevailed at Paris in the autumn of 1907 was to bring exchange nearly to par and to check the outward movement of gold, which has repeatedly compelled the bank to strengthen its reserves by special measures and at heavy cost. It has been largely by its holdings of foreign bills that it has been able to carry on its operations and maintain an adequate stock of gold.[2]

The leading items of the accounts of the bank, for representative years since its foundation, are shown, in francs, in the following table[3]:

Principal Accounts of the Bank of Belgium.

DEC. 31st.	CIRCULATION.	METALLIC RESERVE.	DISCOUNTS.	DEPOSITS.
	(In francs = $0.193.)			
1851	50,346,210	29,264,880	44,034,953	25,980,830
1860	117,899,960	63,023,535	155,958,745	81,825,144
1870	202,528,520	95,614,523	196,233,878	81,319,921
1880	339,969,510	98,787,206	283,992,826	72,142,896
1890	404,721,600	103,413,340	312,670,661	67,723,926
1892	427,594,580	114,654,737	309,391,705	69,340,318
1894	469,662,000	130,756,515	346,590,227	78,558,169
1895	476,502,020	101,061,507	365,263,291	72,103,788
1896	492,636,910	101,978,446	399,683,424	90,649,788
1898	544,652,040	117,087,292	424,795,032	98,975,211
1900	631,631,800	108,757,109	465,244,299	81,754,197
1902	676,140,330	114,170,310	513,750,490	78,854,638
1903	671,006,560	117,117,388	533,069,957	86,971,009
1904	694,429,290	119,366,357	557,740,290	93,374,199
1905	724,082,140	117,621,107	570,024,215	98,615,552
1906	770,423,340	124,185,128	597,370,467	84,000,000
1907	798,167,160	133,261,800	678,641,352	87,573,812
1908[4]	761,513,400	154,803,550	615,770,545	82,401,579

[1] *Assemblée Générale*, 1908.

[2] Palgrave declared in 1903 that "Through holding these drafts on other countries the council of the bank has the means of operating in any direction when the exchanges are unfavorable to Belgium. . . . Roughly speaking, one-fifth part of the bills it has dealt with during the last twenty years have been on foreign countries."—*Bank Rate and the Money Market*, 185.

[3] *Annuaire Statistique de la Belgique, 1906*, 378.

[4] October 1st.

The Bank of The Netherlands.

The existing Bank of the Netherlands is the successor of the Bank of Amsterdam, one of the most famous of the banks of the Middle Ages. The Bank of Amsterdam was not a bank of issue in the modern sense, but proposed originally to deliver receipts for deposits of coin. The bank was founded by an ordinance of the City of Amsterdam of January 31, 1609, and was called the Exchange Bank (*Amsterdamsche Wisselbank*). Much confusion and many disputes had arisen in the city because of the variety of coins in circulation and their departure from the proper standard. Money of full weight rose to a premium with the exchange brokers and the fact was considered as the result rather than the cause of their operations. The city undertook by a statute of July 15, 1608, to prohibit the holding of deposits or the transfer of money by any one except the owners or their personal agents. The use of bills of exchange was forbidden and traders were directed to make no discrimination between light and heavy coins nor to give or take money at a higher rate than that fixed by the States-General.

These provisions were only intended to clear the ground for the establishment of the new bank under government control. All bills of exchange were required to be paid through the bank, and the institution was required to sell any kind of specie demanded of it at as low a premium as possible. The transferable deposits or credits came to be known as "bank money" and bore this designation throughout the history of the bank. The creation of a means of exchange of fixed and uniform value did much to promote the great commerce of which Amsterdam was becoming the centre. The bank accepted deposits only at their bullion value and granted credit for the amount in lawful money, subject to a proper charge for handling. Deposits were necessarily subject to charges, because the bank was supposed to keep in its vaults every guilder received and to do no loan and discount business. Payments in Amsterdam came to be made universally in bank money, by the pre-

sentation of a transfer order at the bank by the payer or his authorized agent, which entitled the payee to the credit on the next day. The bank became so general a medium of payments in Amsterdam that the most extravagant estimates were formed of the gold and silver stored in its vaults. Some put the amount as high as 900,000,000 gulden ($360,000,000) but the more modest and accurate estimate of Adam Smith was 33,000,000 gulden ($13,500,000).[1]

Direct redemption of bank credits in coin gradually fell into disuse, partly because bank money was so much preferable to coin for nearly all practical purposes and partly because of the acceptance of foreign coins on special deposits. The system of advances upon such deposits was formally put in operation in January, 1683, and the bank issued a receipt to the depositor for the bullion value of the deposit, certifying his right to withdraw it upon returning the bank money with which he had been credited and paying one-eighth of one per cent. interest. The right of withdrawal was forfeited if the charges were not paid and the deposit renewed within six months. It was necessary, therefore, in order to withdraw coin thus deposited, to have both the receipt and the equivalent amount of bank money. The bank money outstanding was in excess of the legal coin in the custody of the bank, but not in excess of the domestic and foreign coin and bullion. The lapsing of receipts protected the bank, therefore, from demands for coin redemption which it could not meet, while another method was adopted to prevent the excess of the bank money in circulation and to provide bullion for those who desired it for export.

The method adopted by the bank for controlling the volume of circulation and maintaining its credit was the sale of bank money for specie or specie for bank money in such amounts as the public might require. Regular agents of the bank were charged with these transactions and kept the premium on bank money within narrow limits and its value substantially unchanged. It was supposed until the last

[1] *Wealth of Nations,* II., 61.

half of the eighteenth century that the bank had sacredly fulfilled its obligations to keep in the vaults the exact amount of coin and bullion represented by the bank money outstanding. The affairs of the bank were kept secret by the small committee of the city government which was charged with its administration, and it was not generally known that as early as 1657 individuals had been permitted to overdraw their accounts and that in later years enormous loans of specie had been made to the Dutch East India Company. The truth became public property in the winter of 1789 and 1790. The premium on bank money, which was usually kept above four per cent., then fell below two per cent. and in August, 1790, disappeared. The bank failed to protect its credit by purchasing bank money on an adequate scale and it was represented that large purchases would be followed by a heavy export of bullion to the injury of commerce. The possibility of deception came to an end when on November, 12, 1790, a notice was issued that silver would be sold to the holders of bank money at a rate equivalent to ninety per cent. of their claims. It was substantially an admission of insolvency and the debt was assumed in 1791 by the government of the City of Amsterdam. The effort was made to put the bank again on its feet, but the time for such banks had passed, the position of Amsterdam as a commercial centre had changed, the bank was closed by a royal decree of December 19, 1819, and the small amount of bank money outstanding was soon after paid off.[1]

The Bank of the Netherlands (*de Nederlandsche Bank*) was authorized by the government in 1814, after it became evident that the Bank of Amsterdam could not be revived. The privilege of the bank was twice renewed for twenty-five years, carrying its charter to March 31, 1889. The next renewal was nominally only for fifteen years, until March 31,

[1] A summary of the result of the researches of the latest scholarship regarding the Bank of Amsterdam, based in part upon the history of the bank by W. C. Mees, formerly president of the Bank of the Netherlands, is presented by Prof. Dunbar in his valuable work on *The Theory and History of Banking*, 82–105.

1904, but an extension of ten years was to be tacitly assumed unless the abrogation of the privilege was decreed by the state.[1] A further extension to 1919 was made by a law of December 31, 1903, when some changes were made in the share of the state in the bank's profits.[2] The law of December 22, 1863, left open the possibility of establishing other banks of issue by special law, but the Bank of the Netherlands has been in fact the only bank of issue in Holland since its establishment. The capital of the bank was originally 5,000,000 florins ($2,000,000) and has been increased from time to time to 10,000,000, 15,000,000, and 20,000,000 florins ($8,000,000). The bank is not a public institution, but the state subscribed in 1863 for one thousand shares at 115, which were sold on June 1, 1864, at 190. The government exercises supervision through a special commissioner paid by the bank, and the president and secretary are named by the king.

The Treasury shares in the profits of the bank when they exceed a fixed amount. Under the law of 1888, dividends of five per cent. were to be paid to the shareholders, even if it was necessary to recur to the reserve fund to make up the amount. Ten per cent. of profits was then to go to the reserve fund until it reached twenty-five per cent. of capital. The remaining profits were to be divided equally between the state and the shareholders until the total dividend allotted to the latter reached seven per cent., after which they were to receive only a third. The portion going to the shareholders was further curtailed by the law of 1903, by the reduction of their initial dividend to three and one half per cent. Then, after allotments to reserve and to the management, the state was to receive two-thirds of the balance and the shareholders only one-third. In case of the refusal of further privileges in 1919, the shareholders are to retain the reserve existing on March 31, 1889, but half the subsequent accretions go to the state.[3]

[1] Lévy, 194.

[2] Raffalovich, in *Économiste Européen*, March 13, 1908, XXXIII., 328.

[3] *Économiste Européen*, March 13, 1908, XXXIII., 328.

There is no fixed limit upon the note issues of the Bank of the Netherlands, but the decree of August 16, 1884, fixed the proportion of the metallic reserve at forty per cent. of the aggregate of notes and deposits. The law imposes no restrictions on the proportion of gold and silver, but since 1872 the bank has ceased to buy silver and has added as much as possible to its gold. Holland suspended the free coinage of silver in December, 1877, and has maintained her monetary system at parity with gold by treating the silver coins as tokens, redeemable in gold.

The monetary system maintained by the Bank of the Netherlands is of peculiar interest, because of the demonstration which it affords that, within narrow limits at least, it is possible to maintain the gold standard with very little gold and while the money of circulation is chiefly of silver and paper. The bank pursues a policy directly opposite from that of the Bank of France, by furnishing gold freely for export and sparingly for domestic circulation. The purpose of this policy is to maintain the parity of foreign exchange, because of the conviction that a refusal to furnish gold for export would put the metal at a premium and precipitate the country upon a silver basis. This danger was a serious one in 1883. The gold reserve, which had been at 56,924,000 florins at the close of 1880, declined in October, 1882, to 11,306,638 florins and in February, 1883, to 5,365,091 florins ($2,150,000). A bill was promptly introduced in the States-General, authorizing the melting of 25,000,000 florins in old pieces of two and a half florins and their sale as bullion, in order to obtain gold. The bill did not become law until March 4, 1884, but the exchanges in the meantime became favorable and the stock of gold rose on April 21, 1883, to 31,000,000 florins ($12,400,000). The bank now stands ready to furnish gold for export or to furnish silver at its bullion value, while the old stock of large silver coins is being gradually reduced by subsidiary coinage for Holland and Java.[1]

[1] *Bimetallism in Europe*, Sen. Ex. Doc. 34, 50th Cong., 1st Sess., 33.

The capacity of the bank to furnish gold on demand was severely tested in 1906 and 1907 as the result of financial pressure in other countries and the necessity for remittances to pay for foreign securities, of which the Dutch public are large buyers.[1] The discount rate, which had been at three per cent. for over a year, was advanced to three and one-half per cent. on April 28, 1906; to four and one-half per cent. on May 4th; to five per cent. on October 11, 1906; and to six per cent. on March 12, 1907. This rate was not long maintained and the bank went through the American panic with a rate of five per cent., fixed on April 23, 1907. The banking year ending March 31, 1907, closed with the gold stock reduced from 72,668,470 florins to 61,819,600 florins ($24,727,800); but the next year witnessed a reflux of the yellow metal, as the result of the diminished demand for credit, and found the reserve at about 97,000,000 florins. It was declared by the management of the bank that "the Netherlands maintained the free gold market on which our credit abroad is based, but we had to guard against excessive withdrawals from our vaults of the metal that is absolutely necessary to maintain the stability of value of the medium of exchange." How large is the presentation of notes to the bank for specie and the counter deposit of gold for notes may be judged by the following figures for representative years:

Exchanges at the Bank of the Netherlands.

YEAR ENDING MARCH 31.	SPECIE PAID FOR NOTES.	NOTES PAID FOR SPECIE.
	(In florins = $0.402.)	
1875	34,098,655	27,695,070
1880	42,460,765	32,254,525
1885	51,657,925	35,714,565
1890	56,338,280	37,843,825
1895	71,856,675	53,458,120
1897	86,358,645	61,617,365
1899	94,754,665	67,505,170
1900	100,994,655	70,349,365
1902	104,058,125	70,951,255
1904	112,407,390	78,461,545
1905	112,589,890	84,581,550
1906	105,795,960	78,796,920
1907	113,828,340	87,606,320

[1] London *Bankers' Magazine*, December, 1907, LXXXIV., 749. It

The gradual expansion of the business of the Bank of the Netherlands, upon the average for five-year periods and in recent years is indicated by the following table[1]:

Accounts of the Netherlands Bank.

AVERAGE FOR YEAR ENDING MARCH 31.	NOTES IN CIRCULATION.	METALLIC STOCK.	DISCOUNTS AND LOANS.	CURRENT ACCOUNTS.
	(In florins=40.2 cents.)			
1869–74	154,700,000	110,940,000	91,610,000	29,720,000
1874–79	186,820,000	140,230,000	100,740,000	36,350,000
1879–84	190,420,000	130,020,000	92,960,000	14,850,000
1884–89	199,020,000	150,430,000	85,070,000	19,050,000
1889–94	202,210,000	123,980,000	106,160,000	11,500,000
1894–99	206,910,000	124,410,000	105,590,000	6,270,000
1902–1903	230,960,000	135,970,000	117,960,000	5,810,000
1903–1904	234,700,000	129,780,000	128,040,000	6,050,000
1904–1905	247,370,000	143,590,000	127,810,000	7,730,000
1905–1906	268,850,000	152,150,000	140,030,000	5,090,000

The balance sheet of March 31, 1907, showed total liabilities of 300,344,532 florins, of which 20,000,000 florins was on account of capital, 259,552,488 florins ($103,821,000) on account of note issues, and 11,138,760 florins on current accounts.

Banking in Sweden.

The three countries of the Scandinavian Union,—Sweden, Norway, and Denmark,—have an uniform monetary system based upon the gold standard with the crown as the unit, worth twenty-six and eight-tenths cents ($0.268) in United States money, but each country has a banking system of its own. The State Bank of Sweden (*Sveriges-Riksbank*) was founded November 30, 1656, and to Palmstruch, its founder, is attributed the first use of bank bills as credit money, not fully covered by the coin reserve. The bank became a public institution in 1668, and its capital is furnished by the

is the opinion of experts in Holland that holdings of American securities there are over $400,000,000,—not greatly less than all other Continental bourses.—U. S. Consular Reports, July 12, 1907, 8.

[1] *Jaarcijfers voor het Koninkrijk der Nederlanden, Rijk in Europa, 1905*, 222.

nation, but the administration is under the charge of a commission chosen by the Diet and is not responsible to the executive department of the government. The capital of the bank, prior to the reform of 1897, was 25,000,000 crowns ($6,700,000) with a reserve of 5,000,000 crowns, and it was allowed to issue notes to the amount of both, plus its credits with foreign banks and its metallic reserve.[1] The reserve was not allowed to fall below 10,000,000 crowns. The notes are a legal tender by the Swedish constitution in Sweden and are receivable by public depositaries.

The private banks grew up at first without regulation, but became subject to general law in 1864. A new law of January 1, 1887, imposed certain general conditions upon these banks, most of which are still in force.[2] The capital of each is required to be at least 1,000,000 crowns ($268,000), the charter runs for ten years, and the shareholders are responsible only for the amount of their shares.

Sweden in 1897 followed other important European states in taking measures to concentrate the power of note issue in a single institution. The nucleus of the new system existed in the State Bank, whose character was not changed as to ownership and organization, but which was given by the law of May 12, 1897, larger powers and more exclusive privileges. The changes as to note issues did not become fully effective until January 1, 1904, but the capital of the State Bank was increased in the meantime to 50,000,000 crowns ($13,400,000) and the way paved for gradually eliminating the circulation of the private and joint stock banks. As early as 1879 the privilege of issuing notes for five crowns ($1.34) was reserved to the State Bank, and in 1887 its limit of issue was raised to 45,000,000 crowns and the cash holdings were required to be 18,000,000 crowns. The law of 1897, consolidating note issues, raised the maximum limit of circulation to 100,000,000 crowns and required minimum cash holdings to be 25,000,000 crowns, all in gold. A sub-

[1] Muhleman, 149.
[2] Lévy, 219.

sequent modification of this law, which took effect January 1, 1902, raised the gold requirement to 40,000,000 crowns, but permitted the balance to be covered by foreign government bonds, foreign and inland bills, and Swedish bonds quoted on foreign stock exchanges.[1]

Provisions were made in the law of 1897 for compensation to the private banks for the privilege of note issue withdrawn from them. It was the motive of the law to perpetuate them as joint stock banks and to induce them to continue to grant the same accommodation to commerce as before. To these ends banks retiring their circulation before the end of 1905 were given a credit with the State Bank against approved collateral at a rate two per cent. below the published discount rate (but not below a rate of two per cent.), and rediscounts at a rate not exceeding two-thirds of the published rate. The amount of each of these privileges was fixed at one-half the circulation of the bank on January 1, 1896, and was conditioned on the requirement that the local bank should not discontinue any branch existing on that date. For those banks which kept their circulation until the beginning of 1904, the privilege of rediscount was limited to forty per cent. of their issues.[2] The number of banking offices of the banks of issue existing in 1903 was about 183, of which 24 had come into existence since 1896, and several belonged to banks which withdrew promptly from the note-issuing field and continued as joint stock banks.

The concentration of the power of note issue has tended to a concentration of metallic reserves, but has left the State Bank, as before, dependent on its note issues for its resources, while the private and joint stock banks depend upon their deposits. This wide divergence in character of operations by these different types of banks is revealed by the statistics of the condition of the different classes of banks on January 1, 1907, after the new system had been in full operation for three years.[3]

[1] Flux, in *Yale Review*, February, 1903, XI., 364.

[2] *Ibid.*, 369.

[3] *Économiste Européen*, June 5, 1908, XXXIII., 732.

Condition of Swedish Banks, January 1, 1907

ITEMS.	STATE BANK.	PRIVATE BANKS.	JOINT STOCK BANKS.
	(In crowns=$0.268.)		
Capital	50,000,000	125,300,000	181,371,580
Reserve	8,735,000	79,164,438	86,922,419
Deposits	3,245	431,502 028	388,706,087
Bank notes and drafts outstanding	203,757,814	18,478,273	20,435,829
Specie on hand	74,428,265	22,666,539	29,317,062
Due from banks	68,509,757	34,339,000	40,926,839
Discounts	153,781,160	255,929,602	298,115,938

The note circulation of the Royal Bank, which was 201,911,044 crowns at the close of 1906, declined to 190,115,534 crowns ($50,810,000) at the close of 1907. The gold reserve declined only from 71,929,953 to 70,322,453 crowns, while discounts increased from 149,596,027 to 191,954,154 crowns and deposits and current accounts from 45,121,588 to 61,139,290 crowns. Net profits, which in 1906 were 7,133,396 crowns, were in 1907, 9,639,023 crowns ($2,575,000).[1]

The Bank of Norway.

The Bank of Norway (*Norges Bank*) was founded June 14, 1816, with its head office at Drontheim and branches in leading towns of the province. Its capital was raised by a tax upon landed property and the land-holders became shareholders in the bank according to their respective payments. The original capital of the bank was 2,000,000 specie dollars, and circulation was issued provisionally in the proportion of five dollars to two dollars of the capital. One of the purposes of the foundation of the bank was the improvement of agriculture, the discount of commercial bills being at first only a secondary consideration. Loans were made by means of note issues upon land to an amount not exceeding two-thirds of the valuation, and the borrower made a semi-annual payment, including not only interest, but five per cent. annually of the principal, which was thus

[1] *Économiste Européen*, April 17, 1908, XXXIII., 507.

liquidated in twenty years, like some modern mortgage loans. The attempt to float a paper currency upon land values resulted in failure and the notes of the bank in 1822 could be exchanged at Hamburg at the rate of only $187.50 for $100 in silver. The Storthing was compelled to pass a law reducing the value of the notes by providing that 190 in paper should be redeemed in the proportion of 100 in silver.[1] The value of the notes gradually rose and the bank was put upon a sounder basis.

The present capital of the Bank of Norway is 15,500,000 crowns ($4,150,000), but by the last renewal of the charter (by the law of May 19, 1900) may be raised to 25,000,000 crowns. The bank is authorized to issue notes to the amount of 35,000,000 crowns without metallic reserve, and to any additional amount when fully covered by gold. One-third of the computed gold reserve may be on deposit abroad and 3,000,000 crowns may be deposited in the Bank of Sweden and the National Bank of Denmark. A leaf is taken from the experience of Germany in the provision that additional notes may be issued, upon notice to the government, under a tax of six per cent. These changes in favor of greater freedom of note issue were largely the result of the monetary pressure of 1899, which compelled the bank to raise its discount rate first to six per cent. and towards the end of the year to six and one-half per cent., and to exceed the authorized note issue for the first time since its foundation.[2] The notes are legal tender and are the only credit paper having general circulation.

The governing board of the bank is named by the Storthing and consists of fifteen representatives. The actual administration is entrusted to five directors at the central bank and three at each branch, who are also named by the Storthing. The state is a large shareholder, but the management of the bank is kept independent of the Treasury.[3]

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[1] Macleod, *Theory and Practice of Banking*, II., 263–64.

[2] *Bulletin de Statistique*, October, 1901, L., 438.

[3] *Statistique Internationale des Banques d'Émission*, Norvège, 6–7.

The policy of limiting the profits of shareholders was adopted by the law of 1900, in conformity with the policy adopted at about the same time by France, Belgium, Germany, and Austria-Hungary. The shareholders first receive dividends of six per cent. Of the excess, ten per cent. is added to the reserve funds, and the remainder is divided equally between the state and the shareholders; but after the portion of the shareholders has reached ten per cent., three-quarters goes to the state.[1]

The note circulation of the bank has expanded with the expansion of Norwegian trade, but the increase in discounts and deposits has been shared to some extent with other institutions. The extent to which the permission to keep the reserve abroad has been availed of is indicated by the fact that on December 31, 1905, the total reserve was 37,779,045 crowns and of this amount 13,442,432 crowns was on deposit with foreign banks. By the close of 1907 the amount on deposit abroad, including 3,531,035 crowns in the Banks of Sweden and Denmark, was 21,083,922 crowns. The following figures indicate the variations in some of the principal items of the accounts in recent years[2]:

Accounts of the Bank of Norway.

DEC. 31st.	NOTES IN CIRCULATION.	METALLIC RESERVE.	DISCOUNTS.	DEPOSITS.
	(In crowns = $0.268.)			
1885	37,147,456	28,675,610	23,275,493	6,653,796
1890	49,670,702	38,895,523	25,979,248	6,879,364
1895	50,970,375	36,759,465	30,693,354	9,345,183
1900	65,611,696	36,502,201	48,007,067	6,120,663
1902	62,915,738	33,523,812	48,374,428	8,659,755
1904	60,171,033	36,886,822	36,173,332	10,061,198
1905	65,664,540	37,779,045	40,787,656	9,980,919
1906	68,935,018	46,657,080	41,439,433	10,422,715
1907	73,483,136	48,451,754	45,438,191	9,480,855

[1] *Bulletin de Statistique*, October, 1901, L., 437.

[2] *Statistisk Aarbog for Kongeriget Norge*, 1906, 83, and prior years; for 1906 and 1907, *Économiste Européen*, April 10, 1908, XXXIII., 476.

The National Danish Bank.

The National Danish Bank was founded in 1818 and has a capital of 26,752,400 crowns ($7,000,000). The bank was the successor of the State Bank (*Rigsbanken*), which had been created by the government in 1813 to restore order to the demoralized financial system of the country. A decree of July 4, 1818, transferred the privileges of the old bank to the new for a term of ninety years. The government was free at the end of this period, in 1908, to extend the privileges or revoke them. The capital of the National Bank is in private hands, but it was collected by an enforced levy upon real estate, and the landowners became shareholders in the bank for the amount of the tax paid. The bank assumed the obligations of the State Bank and was unable to pay dividends until 1845. The dividends since that time have averaged about seven per cent. A decree of 1873 fixed the limit of circulation not fully covered by specie at 27,000,000 crowns, but this was increased by a decree of November 5, 1877, to 30,000,000 crowns. The metallic reserve was not permitted in any case to fall below three-eighths of the face value of the notes, and at least 12,000,000 crowns was required to be in gold coin or in bullion which had been actually delivered to the mint for coinage. The other portions of the metallic reserve may be in gold bars or foreign gold coin and in foreign silver to an amount not greater than one-third of the entire fund.[1]

By a decree of 1886 net balances in favor of the bank at the Bank of Norway and the Royal Bank of Sweden might be counted as a part of the legal reserve.[2] The notes are legal tender and the amount varies considerably with the seasons.

The charter of the bank, with the exclusive privilege of note issue, was renewed by a law of July 12, 1907. The proportion of reserve required was increased to fifty per cent.

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[1] *Comptroller's Report, 1895*, Report of Minister John E. Risley, 77.
[2] *A History of Banking in all the Leading Nations*, IV., 382.

of notes outstanding, and it was provided that the bank should from its profits first pay 750,000 crowns ($200,000) into the public Treasury and also pay into the Treasury one-quarter of the profits remaining after the distribution to the shareholders of a dividend of six per cent.[1] As banking is comparatively unrestricted in Denmark except in the matter of note issue, the National Bank has encountered active competition from joint-stock banks and private bankers; but its circulation and general accounts have gradually increased in volume. The average issue of bank-notes was about 50,000,000 crowns for the five years ending with 1871; 69,000,000 crowns for the five years ending with 1881; and 78,000,000 crowns ($21,000,000) for the five years ending with 1891. The balance sheet for July 31, 1907,—the end of the bank's fiscal year,—showed circulation of 121,675,000 crowns ($32,830,000); a gold reserve of 95,069,000 crowns ($25,600,000); and commercial discounts of 35,581,000 crowns ($9,550,000).

The National Bank took an active part in allaying the tendency to panic which followed an important bank failure in the winter of 1908. The pressure in Germany reacted upon all the Scandinavian countries, and especially upon Copenhagen, by the withdrawal of foreign capital from Scandinavian enterprises.[2] The result was the suspension on February 6, 1908, of the Freeholders' Bank (*Grundejerbank*), followed by a run on several institutions and a serious fall in the value of bank shares. The Retailers' Bank (*Detailhandlerbank*) in particular suffered a drop of twenty points in its shares and fears were entertained for its safety. Accordingly, on Sunday, February 9th, a meeting was called by the Minister of Finance, at which the National Bank and the four other leading banks were represented. It was finally decided that the Treasury and these five leading banks should jointly undertake a full guarantee not only for the liabilities of the suspended bank, but also for the Retailers' Bank. The guarantee was unlimited, but as a

[1] *Économiste Européen*, November 8, 1907, XXXII., 602.
[2] London *Economist*, February 15, 1908, LXVI., 314.

preliminary step a fund of 20,000,000 crowns ($5,360,000) was subscribed.[1] An administrative committee, presided over by Falbe Hansen, the eminent economist, was appointed to supervise the management of the two banks which had become involved in difficulties.

[1] London *Bankers' Magazine*, March, 1908, LXXXV., 440.

CHAPTER XII.

THE BANKS OF SOUTHERN EUROPE.

Development of Banking in Switzerland—The National Bank of the Swiss Confederation—The Bank of Spain and its Entanglements with the Treasury—Similar Situation of the Bank of Portugal—The Banks of Roumania, Bulgaria, and Servia—The Greek Banks and the Effects of Specie Suspension—The Ottoman Bank.

BANKING in Switzerland had its earliest development at Basle and Geneva, which were long noted for the skill and wealth of their bankers, but banks of issue were not established in either city until 1845. The first Swiss bank of issue was established at St. Gall in 1836. The cantonal bank of Vaud and the Bank of Basle were established in 1845, the Bank of Commerce at Geneva in 1846, and the Bank of Geneva in 1848. The incorporation of banks of issue rapidly spread among those cantons which contained a considerable number of merchants, and in 1863 eighteen banks had been established, with forty-two agencies or branches. The aggregate circulation of these banks on December 31, 1862, was 18,468,122 francs ($3,600,000), the cash reserve was 19,380,922 francs and the current accounts, representing deposits, 49,166,405 francs ($9,800,000).[1] Eleven of these eighteen banks were established with the help of the cantonal governments and the remainder were established by private funds.

The Swiss banks preserved until 1875 a purely local existence and their operations and circulation rarely extended beyond the limits of the canton in which they were estab-

[1] Courcelle-Seneuil, 350.

lished, but the growing needs of commerce invited co-operation and the extension of banking facilities. Some of the banks began to extend their branches into other cantons and others made conventions with each other for the mutual acceptance of their bills. It was at this stage in the development of Swiss banking that the Federal constitution was revised and authority to legislate regarding banks confided to the Federal government. Protection against monopoly was afforded by the provision of the constitution that Federal legislation "shall not establish a monopoly of the issue of bank bills nor decree their obligatory acceptance." The law of 1875 required the Swiss banks to maintain a cash reserve equal to forty per cent. of their notes in circulation and forbade any one bank to issue circulation in excess of 12,000,000 francs ($2,400,000). Each bank was required to accept the notes of other banks and to redeem them in coin. The number of banks at the end of 1873 was twenty-eight and their circulation was 47,606,000 francs ($9,400,000), against which there was a cash reserve of 14,892,796 francs.

The Act of 1875 was superseded by that of March 8, 1881, which limited the circulation to double the paid-up and unimpaired capital (*capital versé et réellement existant*) of the banks and required banks of issue to have a capital of at least 500,000 francs. The requirement of a forty per cent. cash reserve was maintained, to be distinct and independent of the other reserves of the bank and kept in a separate account. The remainder of the circulation was required to be fully covered by the deposit of securities or commercial bills. Weekly, monthly, and annual reports are required according to a form prescribed by the Federal Council and an annual examination is made under public authority.[1] The notes are issued through the Federal inspectorate, are delivered to the banks as they need them, and are of a uniform type. A bank which renounces its circulation is required to redeem the notes for a certain time, to surrender the redeemed notes to the Federal authorities and after the

[1] Alfred Neymarck, Article, "Banque," in *Dictionnaire d'Économie Politique*, I., 145.

expiration of the period fixed for redemption to pay into the Federal Treasury an amount of coin equal to the face value of the notes still outstanding. The government then assumes the obligation of redemption for thirty years, after which the balance goes to a public fund.

The Swiss banking system as embodied in the law of 1881 was a system of free banking under government supervision. The Federal Assembly reserved the right to fix the aggregate of the Swiss circulation and to apportion it among the banks, but this right was exercised only for the purpose of compelling the banks to conform to certain uniform requirements. Twenty-six of the Swiss banks entered into a clearing arrangement by authority of a law of June 19, 1882, for the mutual exchange of notes. These banks were known as "The Associated Banks" (*Banques Concordataires*), and their notes circulated throughout Switzerland and were received by public depositaries. The central government at no time guaranteed the bank-note circulation nor made the notes legal tender in private transactions.[1] One of the peculiarities of the Swiss banks, however, was that a majority (constituting twenty-two out of thirty-six at the close of 1906) derived their capital from the canton and relied upon the guarantee of the canton for support in case of need. They were thus substantially state banks, operating upon a miniature stage, and out of this fact grew many of the defects of banking conditions in Switzerland.

The law of 1881 was intended to remedy those defects which grew out of lack of uniformity of note issues, deficiency of redemption facilities, and unwarranted competition. As the existing banks had grown up, however, under varying conditions, they had many points of weakness which could not easily be removed without a reconstruction of the entire system. It was forbidden by the law of 1881 to those banks whose issues were based on commercial paper to deal in securities or products for future delivery, to hold real estate, or engage in promotions; but these transactions were

[1] Lévy, 216.

not forbidden to those institutions where such restrictions would have been most salutary—the banks whose circulation was covered by securities or rested upon the guarantee of the canton.[1] Hence the character of the assets in respect to ready convertibility grew steadily worse. From 1883 to 1900 commercial discounts of the Swiss banks increased only from 176,000,000 to 181,000,000 francs, while holdings of securities increased from 219,000,000 to 615,000,000 francs.[2]

Efforts to promote the free interchange of notes had begun as early as 1876, when a concordat was signed by twenty-one banks, by which they received each other's notes at par and acted as mutual collecting agents. A central clearing bureau was established at Zurich, which at first handled a large volume of business, but soon fell into decadence.[3] The law of 1881 was followed by a new series of agreements, which again worked well for a few years, only to again fall into disuse. The difficulty of the situation lay largely in the competition among the banks for business, which led the small banks to bid for paper which the large banks had rejected, and to wide variations in rates of discount, which prevented any intelligent control over exchange. So serious did these evils become that a new agreement was entered into by twenty-eight banks on June 3, 1893, "with the end of protecting the metallic reserves of the country." Under this agreement authority was given to a committee representing five leading banks to fix a uniform rate of discount, below which none of the contracting banks should discount paper having less than ten days to run.[4]

Even with the best of spirit on the part of the banks of issue, they could make head with difficulty against the

[1] Bouchmil, 48. In 1885 only six banks based their issues on commercial securities. They represented a circulation of 35,000,000 francs out of a total of about 135,000,000.

[2] *Ibid.*, 111. At the close of 1907 the figures were respectively 260,100,000 and 931,281,000 francs.—*Controle des Billets de Banque*, 1907, Tab. III.

[3] Bouchmil, 33.

[4] *Ibid.*, 130.

competition of the private banks, and while some of the latter were drawn into an agreement in 1894, they soon denounced it or found means of evading its requirements. Modifications were made in the agreement at the general assembly of banks of issue October 9, 1900, but they were found too burdensome and were abolished the next year.[1] In the meantime a special convention on June 9, 1900, gave to a central committee the power to reduce the volume of circulation when it judged that market conditions required it.[2] Under this authority actual reductions were made for several years, running as high as ten per cent. of the authorized circulation for 134 days in 1903, and seven and a half per cent. for eighty days in 1904. The revival of business activity made heavier demands upon the circulation in the next two years, so that the maximum reduction in 1905 was five per cent. for eighty-eight days and in 1906 five per cent. for ninety days. The manner in which the reduction was accomplished was by the direct delivery of notes by each bank to the federal inspectorate.[3] Another step, designed to check unwarranted competition for deposit accounts, was taken by a convention at Lausanne, June 10, 1905, at which it was decided that the rate accorded by bankers on checking accounts payable at sight should be one and a half per cent. below the official rate of discount, but in no case higher than three per cent. or lower than one per cent.[4]

Most of the difficulties of the Swiss banks were accentuated by the persistently adverse course of exchange with France. Never in any year from 1888 to 1908 was the average rate for francs in Paris below par in Switzerland and most of the time it was at such a premium as made it profitable to import French bank-notes, sell them for Swiss money at a premium, demand redemption of Swiss notes in silver, export the silver to France, and again bring back French

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[1] Bouchmil, 134.
[2] *Ibid.*, 124.
[3] *Controle des Billets de Banque*, 1906, 29.
[4] *Ibid.*, 1905, 28.

bank-notes for the renewal of the process.[1] At an early date after the decline in silver bullion Switzerland was practically denuded of gold, and the profits on exchange were figured upon the cost of exporting the silver coins of the Latin Union. While there were certain seasons of the year at which exchange was more favorable to Switzerland than at others, there were six years between 1889 and 1901 in which the minimum rate was at par or higher, indicating that coin would not be drawn at any time in these years, in the ordinary course of commercial operations, to take the road over the Alps into Switzerland. It was out of these conditions that grew many of the efforts which have been set forth to restrict circulation, restrain competition, and bring about co-operation among the banks. So severe was the burden imposed by the drain of silver upon the banks near the French frontier, in compelling them to obtain specie at a premium to maintain their reserve, that one such bank surrendered its power of issue, and the others in June, 1899, persuaded their associates to share a part of the burden.[2]

It was inevitable that while these difficulties, growing out of the lack of unity in the Swiss banking system, were steadily growing more serious, a movement should gain headway in favor of centralization.[3] Already, before the law of 1881 (in March, 1879) a plan was presented to the National Council for a bank controlled by the Confederation. The opponents of change were able to put its advocates in an unfavorable parliamentary position, and the revision of the constitution which was required was rejected by the people in 1880 by 260,126 votes against 121,099. The political crisis

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[1] *Cf.* Bouchmil, 136.

[2] Bouchmil, 141.

[3] It was declared by the Federal Council in a report made in the summer of 1904: "We know by experience that it is not possible, under the existing system of note issue, to hope for a fundamental improvement of these unhealthy conditions or the disappearance of such dangers. What may be hoped with certainty is that the creation of the [national] bank will lead to a sensible change." — *Économiste Européen*, July 8, 1904, XXVI., 36.

of 1887, however, when war threatened between France and Germany, led the Swiss banks to almost suspend the granting of credit and called renewed attention to their relative financial helplessness in meeting pressure from France.[1] After various proposals to amend the law of 1881, an amendment was adopted to Article 39 of the constitution, October 28, 1891, authorizing the Confederation to create a central bank under its control. Out of this vote grew the project of 1896, which authorized a central bank with a capital of 25,000,000 francs, to be provided two-fifths by the cantons and the remainder by the Confederation. It was upon this provision, for creating a state-owned bank rather than a joint-stock bank with private ownership, that the campaign principally turned when the project was submitted to the people by the referendum. The French cantons opposed to the state socialism of the Germans rolled up immense majorities against the project and it was defeated by a vote of 255,984 against 195,764.

The deadlock which thus seemed to be created was not finally ended for more than eight years. Measures for meeting the popular mandate were introduced, however, on the morrow of the referendum, and the subject was carefully studied by various Swiss commercial bodies. A project of law submitted by the Federal Council to the parliamentary committee on March 24, 1899, was abandoned June 28, 1901, because of disagreement over the location of the head office of the bank.[2] But efforts to reach agreement were not relaxed and finally, after many delays, the law of October 6, 1905, created the Swiss National Bank. Efforts to secure a referendum failed to bring together more than 28,137 signatures out of 30,000 required,[3] and on June 20, 1907, the bank entered upon its functions.

The principal task of the Swiss National Bank was declared in its second article to be "to serve in Switzerland as regulator of the money market, to facilitate operations of payment,

[1] Bouchmil, 58.

[2] *Ibid.*, 79.

[3] *Controle des Billets de Banque*, 1905, 26.

and to provide for the employment of circulating capital." The ultimate capital was fixed at 50,000,000 francs ($9,650,000), of which only half was required to be paid in. The Confederation no longer appeared as a shareholder in the final draft of the law; but the cantons were allowed to subscribe for two-fifths of the capital and the existing banks for one-fifth in proportion to their circulation at the close of 1902. The shares not thus taken were left open to public subscription. If any shares were not taken at first, they were to become the property of the Confederation, but under a mandate that they be promptly disposed of in the market.

The government of the bank was to be exercised through the general assembly of the shareholders, but a majority of these, under the division of capital proposed, might represent the cantons and the old cantonal banks. Moreover, the council of the bank, which was to exercise general supervision over its operations, was to be made up of twenty-five members chosen by the Federal Council, and only fifteen by the shareholders. The council elects a committee of seven members, to which much of its authority is delegated, and local committees of from three to seven members each. The general directors, three in number, are appointed by the Federal Council, upon the nomination of the council of the bank. In them is vested the authority to fix the rate of discount, to name officers and to fix salaries, subject to the approval of the Federal Council.[1] There is also a commission of control named each year by the general assembly for the purpose of verifying the accounts. The question of the location of the head office of the bank, which had caused much controversy, was settled by establishing the directors

[1] Articles 55 and 63. M. Roulleau regards these provisions, with the absence of restrictions on loans to the Confederation and the cantons, as going too far in the direction of a purely state bank. He says that "it is necessary to trust entirely to the wisdom and discretion of the public powers to resist the temptation to have themselves accorded exaggerated credits by the bank. This is the danger of every state bank and this one departs but little from that type."—*Économiste Européen*, November 17, 1905, XXVIII., 620.

of the departments of commercial operations and of control at Zurich and the director of the department of note issue at Berne.

The National Bank has unlimited power of note issue so far as amount is concerned[1]; but the provisions for the security held against it are exacting. There must be a reserve of forty per cent. in Swiss metallic money or foreign gold. The remainder of the security must be in domestic or foreign bills of exchange; but it is especially provided that all the demand obligations of the bank must be covered by paper of short maturities and that the paper falling within this definition is that which falls due or is collectible within ten days.[2] Notes must be redeemed at par at all offices of the bank and are accepted at par at government offices, but can be made legal tender between individuals only in case of necessity in time of war. The minimum denomination of notes is fifty francs ($9.65). An earnest effort was made in committee to fix the minimum at twenty francs, but was defeated upon the ground that it was desirable to encourage the circulation of coin.

The law of 1881 had provided against the perpetuation of vested right in the power of note issue by prescribing that the grant of the power should create no right to indemnity in case it should be withdrawn. The new draft of Article 39 of the Constitution, however, adopted in 1891, provided that the profits of the proposed central bank, after the deduction of an equitable interest on the capital, should go in the proportion of at least two-thirds to the cantons. It was these provisions which guided the distribution of the earnings of the National Bank under the new law. Ten per cent. of net profits, but not exceeding 500,000 francs, is first set aside for the reserve fund; a dividend of four per cent. is allotted to capital; then an allowance is made to the cantons, based upon the circulation of the old local banks and upon popula-

[1] It was proposed in committee to impose a tax of five per cent. on issues above a certain limit, as under the German system; but this was rejected by a large majority.—Bouchmil, 202.

[2] Article 21, *Bulletin de Statistique*, November, 1905, LVIII., 532.

tion; and the remainder is divided in the proportions of one-third to the Confederation and two-thirds to the cantons.

The new law provided that the local banks should retire their circulation within three years after the National Bank should have begun operations. The method of doing this was the same as in reducing circulation under the banking convention of 1900—by the surrender to the inspectorate of notes to the amount of one-twelfth of outstanding circulation at the end of every quarter. In case the notes could not be obtained, a corresponding amount of specie was to be surrendered. The notes were directed to be destroyed; the specie was transferred to the National Bank for the redemption of the notes when received.

The average circulation of the local banks increased from 66,973,000 francs, or 24.30 francs ($4.70) per capita for the ten years ending with 1880, to 120,964,000 francs, or 42.65 francs ($8.23) per capita for the ten years ending with 1890, and 187,330,000 francs, or 59.15 francs ($11.41) per capita for the ten years ending with 1900. The average circulation for the year 1880 was 92,851,000 francs; for 1890, 152,244,000; for 1900, 228,865,900; and for 1906, 240,569,159 francs. The cash held did not vary greatly in the last few years before the creation of the National Bank, having been 108,999,979 francs in 1900, and 120,102,863 francs in 1906.

The circulation of the National Bank stood on December 31, 1907, including notes of the local banks in process of retirement, at 159,220,050 francs ($30,730,000), and its cash consisted of 75,483,429 francs in gold and 5,860,620 francs in silver. Although barely established when the crisis of 1907 in America reacted upon European markets, it weathered the storm with a rate of discount lower than the maximum of many other European banks. The rate of five per cent., which was fixed August 15, 1907, was advanced in October to five and a half per cent.; but this was the maximum found necessary, and a reduction was made January 16, 1908, to five per cent. and January 23d to four and a half per cent.

Within the next six years the National Bank fulfilled the expectations of its founders in protecting the gold stock of

the country, while maintaining a favorable rate of discount. The circulation showed a high degree of elasticity, declining in 1913 from a maximum on January 2d, of 335,816,650 francs ($64,800,000) to a minimum on June 21st of 253,562,100 francs ($48,935,000) and closing the year at 313,821,300 francs. The average metallic reserve was 193,612,000 francs, which amounted to 71.09 per cent. of the average note circulation. The average rate of discount in 1911 was 3.70 per cent.; in 1912, 4.20 per cent.; and in 1913, 4.81 per cent.[1]

Banking in Spain.

Spain had banks of deposit during her period of prosperity in the Middle Ages, some of which, like that at Barcelona,[2] attained considerable celebrity. These institutions disappeared with the decadence of Spanish commerce and it remained for the modern age to witness a new development of banking. An attempt was made in the eighteenth century to establish institutions of credit, and the Bank of San Carlos, which was founded in 1782 at Madrid, was still in operation when the monopoly of the issue of circulating notes was given to the Bank of Spain in 1874. The Bank of Spain was founded in 1829, under the name of the Bank of San Fernando, but did not enjoy any special privileges outside of Madrid and the places where it had branches until 1856.[3] It was at first a government bank and its name was changed at the time of the new legislation to the Bank of Spain, but even after 1856 the right to incorporate other banks of issue remained in the hands of the government. Such banks had been established prior to 1856 by the consent of the public authorities in much the same manner as departmental banks might have been established in France before 1840.

The legislation of January 8, 1856, was simply a first step in the direction of monopoly, like the similar legislation

[1] *Controle des Billets de Banque*, 1907, 20.

[2] This bank, founded in 1401, is said to have been the first bank of deposit instituted for the accommodation of private merchants.—*Hallam*, II., 530.

[3] Courcelle-Seneuil, 361.

of France and Germany. This law prescribed that there should be not more than one bank of issue in any commercial city. The general provisions regarding the new banks limited their issues to three times their capital, obliged them to keep a coin reserve of at least one-third of their circulation, and fixed the minimum denomination of the notes at one hundred reals ($5). The liberality of these provisions was impaired by leaving to the government the nomination of the governor of the Bank of Spain and of royal commissioners to manage the independent banks. The Bank of Spain had created up to 1863 only two branches, at Valencia and at Alicanta, and there were independent banks at Cadiz, Barcelona, Seville, Malaga, Corunna, Santander, and Vallodolid. The capital of the independent banks was not large, but in this respect it was commensurate with the volume of business in Spain. The Bank of Spain on December 31, 1862, showed a circulation of 208,380,901 reals ($10,400,000), a coin reserve of 107,398,201 reals, deposits of 235,063,731 reals, and a commercial portfolio of 309,231,378 reals ($15,500,000).

The charter of the Bank of Spain was extended in 1856 for twenty-five years and was renewed in 1874 for thirty years. The law of March 19, 1874, conferred upon the bank the exclusive privilege of issuing notes and increased the capital from 132,000,000 reals ($6,600,000) to 100,000,000 pesetas ($20,000,000).[1] All the existing provincial banks, then numbering eighteen, were ordered to liquidate their circulation and transfer it to the Bank of Spain. The bank is not a state institution and the state does not participate in its profits, but it had the authority, under the law of 1874, to require advances by the bank to the amount of 125,000,000 pesetas ($25,000,000) upon the deposit of proper guarantees. The notes of the bank were made legal tender and limited to five times the capital. The capital was increased soon after the Act of 1874 to 150,000,000 pesetas ($30,000,000),

[1] The present Spanish coinage system follows that of the Latin Union, the peseta being the equivalent of the franc ($0.193).

which carried the limit of circulation to 750,000,000 pesetas ($150,000,000).[1]

The necessities of the Treasury led to a new revision of the charter by the law of July 14, 1891, and the extension of the privilege of the bank until December 31, 1921. The new charter authorizes the issue of notes to the amount of 1,500,000,000 pesetas ($300,000,000) against a cash reserve of one-third, of which at least half is required to be kept in gold.[2] The bank was required to pay for these privileges by advancing 50,000,000 pesetas to the government annually for three years without interest or right to reimbursement until the expiration of the charter. The fate of the bank has come to be bound up more and more with that of the state and it has been only by the bank's help that the Treasury was able to meet its engagements. The Treasury budget showed a persistent deficit, and a floating debt was incurred from 1885 to 1893 of 333,000,000 pesetas ($66,000,000). The permanent debt on June 30, 1892, was 6,249,639,975 pesetas ($1,200,000,000),[3] and the charges on account of the debt for 1894 were estimated at 309,219,669 pesetas ($61,000,000 or about $3.40 per capita). Exchange declined about twenty per cent. and railway securities and public stocks fell from fifteen to seventy-five per cent. within five years.

The commercial operations of the bank through its fifty-eight branches became subordinate to the issue of paper notes to cover advances to the state. A large proportion of the assets were locked up in loans on government and foreign securities, which increased rapidly for several years because the bank maintained a uniform interest rate of four per cent., which afforded a profit upon the difference between this rate and the higher rate earned by the securities.[4] This difference was availed of by shrewd speculators to borrow on securities, spend the loan on new purchases of securities,

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[1] Alfred Neymarck, Article, "Banque," in *Dictionnaire d'Économie Politique*, I., 140.

[2] *Bulletin de Statistique*, July, 1891, XXX., 72.

[3] Raffalovich, *Le Marché Financier en 1893-4*, 217.

[4] *Ibid.*, *1891*, 119.

deposit them again as guarantee for a larger loan, and so on without limit. The interest rate was raised in January, 1892, to five per cent., but without entirely curing the difficulty.

The recent history of the Bank of Spain is colored by the results of the war with the United States in 1898 and the efforts since made to restore order to Spanish finances. When war broke out, the Spanish government had already practically exhausted the credit of the country and of the bank. If a sound financial policy had been pursued up to this time, the state would have been in a much stronger position to negotiate loans or to sanction the issue of bank paper under specie suspension, as was done by the Bank of France in the war with Germany. Appeal was again made by the Treasury to the Bank of Spain, and the circulation was forced upward to 1,459,505,000 pesetas on February 11, 1899, after peace had been made with the United States, but while many war expenses were still unpaid. During the war Paris exchange rose for a time above one hundred per cent.—a depreciation of fifty per cent. on the notes of the bank. The restoration of peace brought down the gold premium to twenty per cent., and the Spanish Treasury struggled manfully to pay the interest on the foreign debt, even when augmented by the refusal of the United States to permit the Cuban debt to continue a charge upon the revenues of that island or to assume the debt of the Philippines.

Contrary to the policy of other great state banks, the Bank of Spain did not co-operate heartily with the government in seeking to restore stability of exchange. It was declared in the Cortes in 1900, by one of the ministers, that "The Bank of Spain has departed from its functions and failed completely in its mission."[1] A year later the same minister, Señor Moret, declared[2]:

> The bank does not issue notes against its assets; its notes respond to no operation of credit; and when a bank of issue does not thus function, when its assets are not made up of commercial paper,

[1] Lacombe, *Le Change Espagnol*, 41.

[2] Mitjavile, *La Crise du Change en Espagne*, 124.

but of public securities and Treasury bills, there is no rule, no means, and no remedy for bringing its circulation to a normal basis.

The difficulty lay in the fact that the greater the depreciation of its notes, the greater were the paper profits of the bank. From 1895 to 1899, its net profits rose from 34,230,922 pesetas to 50,400,459 pesetas. These profits were attained in the face of low rates of discount and of interest on loans, which with the unlimited power of note issue permitted the encouragement of speculation in the same manner as prior to the war. Thus, from May 25, 1900, to March 22, 1902, the rate of discount and advances stood at three and one half per cent., while the quotations of the Exterior debt at Paris in February, 1901, were at a figure which afforded a net return of 5.54 per cent.[1]

A resolute effort was made, however, to restore order to Spanish finances with the service of Señor Villaverde as Minister of Finance. He and his successors, by economies and the imposition of new taxes, succeeded in turning Treasury deficits into a surplus, from 1899 down. The sum of these surpluses for the eight years ending with 1906 attained the considerable amount of 492,830,832 pesetas ($90,000,000). From this surplus reimbursements were made to the bank on account of advances on Treasury bills which reduced their amount at the close of 1907 to 210,037,447 pesetas ($40,000,000).[2] One of the measures taken to this end was the collection of customs dues in gold. The law of February 23, 1902, by which this requirement was put in force, sought to avoid an unwarranted increase in tariff charges by fixing a sliding scale of reduction based upon rates of foreign exchange. The benefits of the law in accumulating physical gold were impaired to some extent by a royal ordinance of April, 1903, by which the Bank of Spain was allowed to furnish gold to importers from special gold accounts or by the sale of gold for silver and paper at the current premium.[3]

[1] Mitjavile, 130.

[2] Arthur Houghton, in *Économiste Français*, February 8, 1908, 193.

[3] Fochier, in *Questions Monétaires Contémporaines*, 491.

The fact that the Treasury was no longer a heavy buyer of exchange for its remittances on account of the debt and other charges tended, however, to improve the exchange situation, because the competition for bills was henceforth distributed over a large number of buyers, who were better able than the Treasury to conceal their operations and consult their interests.[1]

A special project was carried out in 1903 for reducing the range of fluctuations in exchange due to speculation. The railways, which had heavy remittances to make at certain dates to Paris for interest on their bonds, found that on such dates the price of bills of exchange in Spanish currency was sharply advanced. The evil was partially remedied by opening a credit at two leading French banks of 50,000,000 francs in favor of the Bank of Spain. The purchase price of bills was fixed from time to time by a syndicate committee and the different railways agreed not to bid against one another for bills at a higher price.[2] This operation involved in effect the borrowing of the amount needed to meet deficiencies in the amount of bills of exchange offered, and for a few months, by careful management on the part of the Bank of Spain in gathering up local bills in different cities, exchange was kept fairly steady; but the credit in Paris was exhausted within a year and the experiment was not sufficiently successful to lead to its renewal.[3]

One of the aims of Señor Villaverde was the revision of the charter of the bank in order to restore it to its commercial functions. The law of May 13, 1902, dealing with this subject prescribed that the Treasury should reimburse to the bank before December 31, 1911, the amount of obligations in its assets represented by Treasury certificates. The

[1] Favre, *Les Changes Dépréciés*, 73.

[2] *Économiste Européen*, January 23, 1903, XXIII., 107.

[3] *Vide Économiste Européen*, January 24, 1904, XXV., 156. Its failure was predicted by Mitjavile on the ground that the available bills would be largely absorbed by those having obligations to meet, who could not afford to wait for the syndicate to appear in the market and reduce rates and would therefore pay any rate necessary to obtain francs.—*La Crise du Change en Espagne*, 151.

Treasury was forbidden to borrow of the bank except by authority of law. The maximum limit of circulation against which only a reserve of one-third was required was reduced to 1,200,000,000 pesetas. Of the required reserve of 400,000,000 pesetas, one-half was required to be in gold. Against the next 300,000,000 pesetas in notes issued, forty per cent. was required to be in gold and the remainder up to a total metallic reserve of sixty per cent. might be in silver. Against the remaining 500,000,000 pesetas which the bank was authorized to issue, fifty per cent. was required to be in gold and the remainder, up to a total of seventy per cent., might be in silver.[1] Accounts in Paris, London, and Berlin could be counted as gold.

More significant of the determination of Señor Villaverde was a section of the agreement of July 17, 1902, between the Treasury and the bank, by which it was declared that the bank "would favor by a special rate of interest the use of commercial, industrial, and agricultural credit by accepting for discount in equal measure paper arising from these different sources."[2] One of the steps directed to this end was to make speculative loans on the public securities less attractive to the public and the bank by increasing the rate of discount. The rate was raised in 1902 to four per cent. and in September, 1903, to four and a half per cent., at which it remained fixed, even during the crisis in other countries in 1907. It was admitted, however, in the annual report of 1907, that the reforms sought by the law of 1902 were not capable of immediate realization, that it was impossible to improvise the substitution for assets consisting of securities of assets exclusively commercial, because this would require the finding of resources which the country still unfortunately lacked.[3]

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[1] *Bulletin de Statistique*, July, 1902, LII., 91.

[2] Mitjavile, 208.

[3] *Économiste Français*, April 18, 1908, 565. Doubt is thrown by Favre upon the earnestness of the bank in seeking to restore sound conditions. He declared that, "spurred on by a minority of speculators and exporters who, at least for the time, have an interest in seeing high exchange, the Bank of Spain thinks only of profiting by

At the session of the Cortes, however, in the summer of 1908 was taken a final step which, when carried out, should relieve the bank of the subordination of its commercial functions to those of the government and lead to the ultimate restoration of stable exchange on a gold basis. This was the enactment of a law, providing for the issue of four per cent. bonds running for fifty years, to the amount of 160,000,000 pesetas, for the exclusive purpose of taking up the outstanding Treasury certificates in circulation and in the vaults of the bank. These certificates were to be received in payment for the new issue, which was offered at 85¾.[1]

The circulation of the bank at the close of 1907 was 1,557,000,000 pesetas ($300,000,000), which was an increase of 33,000,000 pesetas over the close of 1906, but was a decrease of about 80,000,000 pesetas as compared with 1901. One of the difficulties which the bank encountered in maintaining the reserve required by law was the steady accumulation of silver in its vaults as the public preference grew for paper, as in France prior to 1892. The proportions of gold and silver were nearly the same at the close of 1897. Gold was not paid out by the bank, so that what was obtained it was possible to hold. The decline in value of the bank paper caused by the war with America carried it for a time below the bullion value of the silver coins, and reduced the silver in the bank from 267,900,000 pesetas on March 31, 1898, to 112,900,000 pesetas on June 30, 1898. From this point, however, recovery began in the value of paper and this led to an increasing current of silver coins into the bank. By the close of the year 1900 the amount of gold stood at 350,000,000 pesetas, and silver at 400,500,000 pesetas. By the close of 1907 gold had risen only to 391,000,000 pesetas ($75,460,000), while the silver in the bank vaults amounted to 642,000,000 pesetas ($123,900,000).

The commercial discounts showed an increase at Madrid

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the unfortunate monetary situation to realize large profits from the exchanges and the issue of paper money."—*Les Changes Dépréciés*, 70.

[1] *Moniteur des Intérêts Matériels*, July 3, 1908, 2183.

from 947,366,000 pesetas in 1906 to 983,784,000 pesetas in 1907, while in the provinces there was an increase from 435,903,000 to 441,895,000 pesetas. The profits of the bank for the year were 58,260,237 pesetas ($11,250,000), of which about 21,000,000 pesetas was derived from operations with the government or was in government obligations. Cost of administration was 17,369,169 and dividends were distributed to the amount of 30,750,000 pesetas.[1]

The Bank of Portugal.

Portugal has a single bank of issue, whose monopoly in this respect dates only from 1888, but whose origin goes back to the Bank of Lisbon in 1821. This institution was authorized by a decree of November 19, 1846, to unite with the National Surety Company (*Companhia Confianca Nacional*) to form the Bank of Portugal.[2] The last extension of the charter continued the bank for forty years, from 1888 to 1928, and conferred upon it the monopoly of the issue of legal-tender notes in the realm of Portugal and the neighboring islands. Seven other banks,—five at Oporto, one at Braga, and one at Guimarães,—had the power to issue notes for circulation within their respective districts, which were not received by public depositaries. An arrangement of July 8, 1891, authorized the Bank of Portugal to unify the circulation and substitute its own notes for those of the other banks. The bank is managed by a governor appointed by the Treasury for three years and a board of ten directors chosen by the shareholders.

The Bank of Portugal has been from the beginning little more than a gigantic paper-money machine for meeting the necessities of the state. This was the case with the Bank of Lisbon, which issued 20,000,000 milreis ($21,600,000) to take up the government notes. The capital of the bank is 13,500,000 milreis ($14,500,000). The statutes originally imposed careful restrictions on the circulation, but these re-

[1] *Économiste Européen*, March 20, 1908, XXXIII., 379.

[2] Raffalovich, in *Économiste Européen*, March 13, 1908, XXXIII., 329.

strictions have been suspended in order to permit large loans to the government, which have tended to drag the circulation of the bank into the same mire of depreciation as that of the Bank of Spain in the last century. Article 15 of the original law prescribed that the circulation should always be covered by a metallic reserve and negotiable paper maturing in not more than three months and that the metallic reserve should be in gold and should equal one-third the aggregate of the circulation and other demand liabilities. Article 16 fixed the power of note issue at double the capital of the bank and Article 37 limited to 2,000,000 milreis the advances to the state.[1] Both the latter limitations have been disregarded and the circulation is now more than five times the capital and advances to the government are many times the amount fixed by the law. The amount of such advances and loans stood at 53,092,000 milreis in 1905 and increased to 54,290,000 milreis ($58,633,000) in 1907.

A share of net earnings goes to the state. The shareholders receive seven per cent., after certain reserves are set aside, but above seven per cent. there is an equal division with the government. The profits on loans between five and six per cent. are divided, but above six per cent. go entirely to the state.[2] The net earnings of 1907 were 1,739,000 milreis ($1,878,000), which permitted a dividend of nine and a half per cent.

The cash resources of the bank and its readily convertible obligations have tended to decrease in recent years. The demand liabilities at the close of 1907 were 70,967,000 milreis on account of circulation and 1,601,000 milreis on account of deposits. Against them was held 5,079,000 milreis in gold, 4,822,000 milreis in silver and minor coins, and 18,590,000 milreis in commercial discounts. The remainder of the assets were made up of government obligations, gold covering the demand liabilities in the proportion of only seven per cent.[3]

[1] Lévy, 208.

[2] *Économiste Européen*, March 13, 1908, XXXIII., 329.

[3] *Ibid.*, March 6, 1908, XXXIII., 316.

The National Bank of Roumania.

The National Bank of Roumania was founded in 1880, with special privileges at first for twenty years, which were soon extended to December 31, 1912. The capital is 30,000,000 lei ($6,000,000) of which 12,000,000 lei have been paid in. A third of the capital was furnished by the government and the other two-thirds by individuals, but the government in 1900 sold its shares at a large advance. A metallic reserve of at least one-third of the note issues is required and no bill can be issued below twenty lei ($4). The entire circulation must be covered by securities which are readily negotiable, but thirty per cent. of the metallic reserve may be represented by foreign bills of exchange.[1]

The government of Roumania issued paper money soon after its establishment in 1878, guaranteed by the public domains, to the amount of 26,200,000 lei, and the National Bank was charged in 1886 with the withdrawal of this paper and the substitution of its own notes. The amount of this special issue was gradually retired and the bank was reimbursed by the government. Financial difficulties again arose in 1901, however, from which the bank aided in extricating the state, in return for an extension of its charter to 1920. A further extension to 1930 was purchased by an advance of 15,000,000 lei, which the state is required to reimburse in part from its share in the profits of the bank. The shareholders are entitled to a dividend of six per cent. before the state steps in and takes twenty per cent. of what remains, but after 1913 the state will take thirty per cent.[2]

At the time of the creation of the bank in 1880, it was not known whether the monetary standard would be established ultimately on a silver or gold basis, but the bank gained strength so rapidly that it readily accepted in 1892 an arrangement with the government by which the reserve was

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[1] Lévy, 225. The gold standard was adopted in Roumania by the law of March 2, 1890. The unit in the three Slavic countries is the equivalent of the French franc ($0.193).

[2] *Économiste Européen*, March 13, 1908 XXXIII., 329.

to be kept thereafter in gold coin or in bills on London and Berlin.[1] The circulation on December 31, 1882, was 96,968,310 lei, with a reserve of 23,838,000 lei. This reserve stood on December 31, 1892, at 53,160,703 lei in gold and 13,954,389 lei in foreign bills. The circulation at the close of 1906 had risen to 291,685,330 lei and the metallic reserve to 83,575,336 lei.[2] The reaction of the crisis of 1907 in America forced circulation up to 319,742,490 lei. It became necessary to raise the rate of discount by rapid stages to six, seven, and finally to eight per cent., but the reserve was kept intact at more than 100,000,000 lei, and a sum of more than 37,000,000 lei was put at the command of commerce.[3]

The National Bank of Bulgaria.

The bank-note circulation of Bulgaria is issued by the National Bank, which was founded on February 8, 1885, by the government, with a capital of 10,000,000 levs ($2,000,000) in gold. The bank has the exclusive privilege of issuing notes, and they are received in public depositaries and in all other offices of the government. It is required to hold a cash reserve in gold equal to one-third the value of the notes in circulation and to redeem the notes on demand at the central office or at any of the branches. The governor of the bank is named by the Prince upon the nomination of the minister of finance and four administrators are appointed in the same way. The government is represented by two delegates, one a counsellor of the court of accounts and the other a member of the ministry of finance, who exercise official supervision over the operations of the bank.

Economic conditions in Bulgaria suffered severely from 1897 to 1900 by reason of a succession of bad crops. The scanty stock of gold in the country was so far depleted that the premium on exchange rose to seven and a half and briefly

[1] *Vide* article on "The Circulation in Roumania," by Lascar L. Catargi, quoted in *Économiste Européen*, September 30th and October 7, 1904, XXVI., 420 and 452.

[2] *Économiste Européen*, March 8, 1907, XXXI., 316.

[3] *Moniteur des Intérêts Matériels*, May 3, 1908, 1457.

even to eleven and a half per cent., and the government by a law of November 13, 1899, authorized the redemption of bank-notes in silver. In its annual report for 1901 the bank noted the fact that the premium on exchange had mounted to fourteen per cent. and laid its finger on the fatal defect of a state-owned bank,—that its credit was linked inseparably with the augmenting pecuniary needs of the government.[1] Some improvement took place after the government loan of 1902, and exceptionally large crops in 1904 forced the premium on exchange for a moment to the negligible level of half of one per cent[2]; but it was not until 1906 that the premium was entirely suppressed and the exchange of notes for gold was resumed. The bank, under these conditions, decided to limit the denominations of the silver notes which it had issued during the period of suspension to five and ten levs ($1 and $2).[3]

The result of the change in conditions was a rapid influx of gold into the bank. There was a gain of 3,600,000 levs during 1904, carrying total holdings at the end of the year to 9,272,724 levs; by the close of 1905 there was a further advance to 20,600,220 levs and for 1906 to 27,699,000 levs ($5,350,000), while silver remained substantially stationary at 10,688,000 levs ($2,065,000). The circulation of the bank, which was only 1,900,000 levs ($367,000) at the close of 1890, was 21,700,000 in 1900; 32,900,000 in 1903; 37,193,000 in 1905; 44,622,000 in 1906; and 50,000,000 levs ($9,650,000) in June, 1908.

The National Bank of Servia.

The bank-note circulation of Servia is issued by the National Bank of Servia, which was established by the law of January 6, 1883, subsequently modified by the law of September 23, 1885. The capital of the bank is 20,000,000 dinars ($4,000,000), of which, however, only half has been paid up.

[1] Théry, in *Économiste Européen*, October 21, 1904, XXVI., 521.
[2] *Économiste Européen*, May 19, 1905, XXVII., 633.
[3] *Ibid.*, May 31, 1907, XXXI., 697.

The privilege of the bank, which was originally granted for twenty-five years, includes the monopoly of note issues. The notes of ten dinars ($2) are redeemable in silver and those of larger denominations in gold. The bank is authorized, however, to redeem in silver at its market value in a proportion fixed by the minister of finance upon the special petition of the bank. Silver may also be substituted for gold to the amount of not more than twenty-five per cent. of the cash reserve and the bank is not permitted to increase its note issues above two and a half times its reserve.

The provision that the notes may be redeemable in part in silver led to a degree of distrust of the note issues somewhat similar to that which existed in 1893 in the United States regarding the notes issued under the Sherman law. This distrust was not allayed when in March, 1898, the government made an arrangement with the bank for a new issue of 10,000,000 dinars in silver notes to meet the floating debt. It was provided, however, that the amount of silver notes put in circulation should not be greater at any time than 32,000,000 dinars and that as the loan to the government was reimbursed, within the ensuing ten years, the silver circulation should be reduced until it should not exceed 25,000,000 dinars.[1] Improvement in the monetary situation gradually set in, however, and persisted, in spite of the political disturbances of 1903. Only about a year after the violent change of dynasty the minister of finance reported that the premium on gold had fallen to one-fifth of one per cent., and that importation of the yellow metal was under consideration.[2] The next year (1905) found the bank able to reduce the discount rate, which had been seven and a half per cent. where the loan was in gold, to the uniform basis of six per cent. for both gold and silver loans.[3]

The affairs of the Bank of Servia have not grown so rapidly as those of the other Balkan states, but circulation at the close of 1907 was 37,362,927 dinars ($7,225,000) and

[1] *Économiste Européen*, April 22, 1898, XIII., 509.
[2] *Ibid.*, September 23, 1904, XXVI., 398.
[3] *Ibid.*, May 26, 1906, XXIX., 668.

metallic resources consisted of 14,105,842 dinars ($2,715,000) in gold and 7,434,967 dinars in silver, exclusive of funds abroad to the amount of 3,439,753 dinars ($645,000). While the amount had not materially increased over the close of 1905, the change in the ratio had been in favor of gold, the gold holdings in 1905 having been 12,421,106 dinars and silver 8,670,926. Discounts on December 31st were 5,521,560 dinars in 1905 and 6,958,242 dinars in 1907. Current accounts at the close of 1907 were 2,046,226 dinars. The net profits of the year were 788,746 dinars ($153,000).[1]

The Banks of Greece.

Greece had until recently three banks of issue,—the National Bank, founded in 1842; the Ionian Bank, founded in 1839; and the Epiro-Thessalian Bank. The capital of the National Bank is 20,000,000 drachmas. The Ionian Bank has its head office in London and its paid-up capital is £315,507, or 7,887,687 drachmas.[2] All three banks have been dragged into the channel of forced legal tender and depreciated money by the enormous debts of the government and the steadily growing embarrassments of the public Treasury. A law of June 20, 1877, gave forced legal tender quality for the first time in recent years to the notes of the National Bank to a limit of 47,000,000 drachmas ($9,071,000) and to those of the Ionian Bank to a limit of 12,000,000 drachmas ($2,316,000). The money was restored to par in 1884 at a heavy expense to the Treasury, but the suspension of specie payments was thought necessary again in October, 1885, and authority to issue inconvertible notes was extended to the Epiro-Thessalian Bank as well as to the other two banks. The National Bank was authorized to issue notes of which one-third should be covered by coin and bullion, one-third by commer-

[1] *Économiste Européen*, July 10, 1908, XXXIV., 60.

[2] The coinage systems of Greece, Roumania, Bulgaria, and Servia are each based upon the French decimal system and their monetary unit in gold, though having different names, is equivalent to the franc, which is valued by the United States Mint at nineteen and three-tenths cents($0.193.)

cial paper, and one-third by securities. The government borrowed from the bank 14,000,000 drachmas in gold and required it to hold notes subject to its orders to the amount of 70,000,000 drachmas. The bank was given in return for these advances the right to circulate 60,000,000 drachmas on its own account in inconvertible paper. The Ionian Bank was authorized to maintain a circulation of 7,000,000 drachmas, of which 2,000,000 should be on account of the government, and the Epiro-Thessalian Bank was given a maximum circulation of 5,000,000 drachms, of which 800,000 should be on government account. The National Bank was also authorized to circulate 7,000,000 drachmas in small notes, and each of the other banks was authorized to issue 3,500,000 drachmas in such notes. The metallic reserve of the National Bank has been reduced below 2,000,000 drachmas ($400,000) and while gold sometimes reaches the country after the sale of the crops it quickly flies abroad again or disappears into private hoards. The price of gold in paper was 122 in 1889 and 1890, 140 in 1892, 180 in 1893, and 200 in 1894.[1]

The population of Greece is about 2,300,000, and the annual budget for carrying on the government averages about 100,000,000 drachmas ($20,000,000), of which 35,000,000 drachmas is on account of interest on the debt. This interest has not been paid for several years in gold, as required by the contract, but desultory efforts have been made to persuade the holders of the securities to accept new securities in payment of interest or to permit a complete readjustment of Greek finances. The British holders of Greek securities persuaded the London Foreign Office in 1892 to send Major Law to Athens to study the actual condition of affairs and to determine whether the government would be able to meet its obligations. Major Law made a report to the British minister at Athens under date of March 10, 1893, recommending various reforms in the financial system. He showed that the aggregate public debt on January 1, 1893, was about 750,-

[1] Raffalovich, *Le Marché Financier en 1893-4*, 231.

000,000 drachmas ($150,000,000 or about $60 per head). Greece imports more than she exports and the accumulated deficits in the annual budgets since 1877, due to the premium on gold and the inefficient methods of collecting the revenues, have been 674,000,000 drachmas.

Major Law's recommendations were not adopted and no definite plan was at once perfected for the restoration of order to Greek finance. The King, in his speech from the throne on November 8, 1893, afforded striking evidence of the depreciation of the bank-notes and the evils which had come in its train. It was announced that all the subsidiary coins, even to those of bronze, had disappeared and the government recommended the coinage at Paris of nickel pieces of five, ten, and twenty centimes to supply the people with small change. A law was approved December 1, 1893,[1] providing for the payment of 50 per cent. of the interest then overdue on the public debt in bank-bills, for future payments in the proportion of 30 per cent. in gold, and for covering directly into the Treasury certain funds which had been pledged as the guarantee of particular loans. This legislation was avowedly provisional, and the government was authorized by the law to enter into negotiations with the foreign bondholders with a view to a definite readjustment. Several conferences were held at Athens and Paris, in 1894 and 1895, but they proved abortive.

It was not until after the unfortunate war with Turkey in 1897, over the control of Crete, that a definite adjustment was reached by Greece with the holders of her obligations. The great powers then intervened to save the country from political and financial ruin, and the Greek government, yielding to the inevitable, declared that it accepted the mediation proposed, surrendering to the powers the protection of its interests and adhering without reserve to their counsel.[2] Out of this situation grew the International Financial Commission, representing England, France, Russia, Germany,

[1] The Greeks still adhere to the Julian calendar. The actual date by the Gregorian calendar, in use in Western Europe, was December 13th.

[2] Théry, *La Grèce Actuelle*, 21.

Italy, and Austria-Hungary, which took definite charge of Greek finances. Delegates of these powers met at Athens on October 27, 1897, under the presidency of M. Streit, who relinquished temporarily the post of governor of the National Bank of Greece to accept that of minister of finance. Under their agreement, accepted by the Greek government, March 7, 1898, arrangements were made for raising the 94,300,000 francs required to be paid as a war indemnity to Turkey, and for the future division of the public revenue between the bondholders and the state. The three powers most interested—England, France, and Russia—lent the aid of their joint guarantee to a loan of 170,000,000 francs ($32,710,000), which it thus became possible to sell at 100½, although bearing the low rate of two and one-half per cent.[1]

The new adjustment involved an heroic reduction of interest on old loans, but was rendered necessary by the manner in which the resources of the country had been dissipated between 1880 and the collapse of 1893. A careful estimate put the amount which had been realized from 570,000,000 drachmas in loans at only 413,333,500 drachmas, upon which the annual charge for interest and sinking funds was 27,789,900 drachmas.[2] Of the 75,000,000 drachmas raised by the new loan in addition to the amount devoted to the indemnity to Turkey, 30,000,000 was set aside to meet the deficit in the budget for 1897, 25,000,000 to pay the floating debt, and 20,000,000 to meet expected deficits from 1898 to 1902.[3] Interest on the loan of 1887 was reduced to forty-three per cent. of the old rate and on other recent loans to thirty-two per cent., subject to some increase in case the revenues should permit.[4]

[1] This high price was partly due to the surplus of capital then seeking investment. At Paris the amount offered was 41,500,000 francs. Subscriptions were received from 1387 persons for 987,809,475 francs and actual deposits at the Bank of France on account of the instalments were 196,579,000 francs.—*Économiste Européen*, May 13, 1898, XIII., 587.

[2] Théry, *La Grèce Actuelle*, 9.

[3] Raffalovich, *Le Marché Financier en 1897-98*, 612.

[4] Typaldo Bassia, in *Dictionnaire du Commerce*, II., 370.

Beneficial effects were felt at once upon the economic condition of Greece from the firm control of the International Commission, but they only began to be marked after it had been several years in operation. The average rate of exchange, which was 1.68 in 1897, was still at 1.63 in 1902, but fell to 1.56 in 1903; 1.38 in 1904; 1.23 in 1905; 1.10 in 1906; and 1.087 in 1907. These changes occurred largely as the result of confidence in the new régime rather than because of an obviously favorable balance of payments. In 1893 foreign capital was rapidly withdrawn from Greece by the banks, but after 1898 it began to return, with a resulting development of railway and industrial enterprises and expansion of the volume of business of the banks. This is indicated by the increase of drafts to order, which were chiefly foreign bills, issued by the National Bank, from 116,984,000 drachmas in 1896 to 489,284,000 in 1904, and by the increase in exchange operations at the Bank of Athens from 71,728,000 drachmas to 324,214,000 drachmas. The increase in deposits in the two institutions was from 45,854,000 to 130,464,000 drachmas ($25,180,000).[1] Equally notable was the influx of foreign capital for railway and industrial enterprises to the amount of 35,000,000 drachmas and the repatriation of the national securities shown by the increase of the amount of coupons paid in Greece from 459,843 drachmas in 1899 to 789,300 drachmas in 1905, indicating holdings in Greece on the latter date of the value of 21,000,000 drachmas.[2] From 1896 to 1904 the market value of securities quoted on the Greek exchanges, not including the public debt, rose from 156,361,000 drachmas to 272,681,000 drachmas.[3]

Improvements in banking conditions accompanied the growth in the resources of the country. The Epiro-

[1] Théry, *La Grèce Actuelle*, 169.

[2] *Économiste Européen*, May 11, 1906, XXIX., 584. For similar cases of the repatriation of national securities under improved economic conditions, *vide* the author's *Principles of Money and Banking*, II., 344-46.

[3] Théry, *La Grèce Actuelle*, 155.

Thessalian Bank was absorbed in 1899 by the National Bank and the limit of circulation of the latter was advanced from 60,000,000 to 66,000,000 drachmas. In the same year the National Bank aided in the foundation of the Bank of Crete, with a capital of 10,000,000 drachmas and the exclusive privilege for thirty years of note issue in Crete, to the amount of its capital and surplus.[1] The Bank of Athens, founded in 1893, with a capital of 2,750,000 drachmas, is not a bank of issue, but is the leading joint-stock bank and has aided in the accumulation of a gold fund.

The gold resources of the National Bank held abroad increased from 37,194,000 drachmas at the close of 1903 to 47,778,000 drachmas ($9,270,000) at the close of 1906. The circulation issued directly by the bank was well within the legal limit, at 54,450,866 drachmas, at the close of 1906, but the issues on account of the government made the total circulation 129,219,000 drachmas.[2] The government issues, however, were in process of steady reduction, having fallen from a maximum of 165,775,975 to 137,640,239 drachmas.[3] The commercial discounts of the bank, which were 13,782,000 drachmas at the close of 1896, were 21,113,000 drachmas at the close of 1906. Private deposits increased during the same period from 40,260,000 to 119,208,000 drachmas. Net profits in 1906 were 3,974,064 drachmas, from which a dividend of 185 drachmas per share was distributed on the 20,000 shares.

The Imperial Ottoman Bank.

The Imperial Ottoman Bank at Constantinople received the exclusive privilege of note issue in Turkey when it was founded in 1863. The capital was furnished by British and French capitalists and was originally £2,700,000. This was increased in 1865 to £4,050,000 and in August, 1874, by the absorption of the Austro-Ottoman Bank, to £10,000,000, of

[1] Théry, *La Grèce Actuelle*, 151.
[2] *Économiste Européen*, June 7, 1907, XXXI., 732.
[3] *Ibid.*, August 23, 1907, XXXII., 229.

which half has been paid up.[1] The first charter was for thirty years, but a new convention of February 17, 1875, prolonged the privileges of the bank for an additional period of twenty years, until 1913. The bank is required to maintain a cash reserve equal to one-third of its circulating notes and these notes must be paid in coin to the bearer on presentation. They are a legal tender in the districts in which they are issued and where the branches of the bank are established. The government is pledged by the charter to issue no paper money during the continuance of the bank and to authorize the creation of no other bank or establishment with like privileges.

The Turkish people have not yet become large users of bank-notes and are easily excited to distrust. This happened in the summer of 1894, when some forged notes were found in circulation and the public presented £218,000 for redemption within a week. The circulation at the head office, which was £249,000 during the first week in June, fell to £66,000 during the first week of July. The circulation of the bank was as high as £990,000 in 1893, but was only £838,797 at the close of 1894. The experience of this run taught the management the importance of maintaining a strong coin reserve and prepared them for the run which set in during the political disturbances growing out of the Armenian massacres in the autumn of 1895. The government offered the bank the privilege of suspending specie payments for thirty days, but the offer was declined and £1,300,000 in gold was obtained early in November from the Bank of France. The Imperial government were so pleased with the spirit shown by the bank that the charter was extended for twelve years until 1925.[2]

The bank has been extending its branches of late years and has been finding them more profitable as their convenience to commerce has come to be understood. Branches exist at Smyrna, Bagdad, Aleppo, Alexandria, and many other points, and those at Smyrna and Bagdad have shown a material

[1] *Revue des Banques*, May, 1895, XIV., 100.

[2] London *Bankers' Magazine*, December, 1895, XL., 726.

increase of business. An encouraging feature of this development has been the fact that increased advances of capital by the parent bank have not been required at the branches in proportion to the increasing volume of business, but the capital has been obtained in the communities themselves. The growth of deposits has also been an encouraging feature of the bank, the amount having increased from about £8,000,000 of all classes at the close of 1893 to £11,741,705 at the close of 1907. Cash resources, which were £2,963,419 at the close of 1899, advanced by normal steps to £4,134,671 at the close of 1906. In the crisis of 1907, the bank pursued the same prudent course as in 1895, so that its cash and money at call at the end of the year stood at £5,023,400. In both Turkey and Egypt, where the operations of the bank are conducted, trade conditions were much disturbed in 1907, and some of the foreign banks felt the consequences seriously.[1] The failure of the crops caused such suffering in Turkey that the government reduced import duties on grain and made free distributions of seeds.[2] The Imperial Ottoman Bank, however, suffered no material losses and was able to distribute an annual dividend at the rate of nine per cent., which had been paid for 1906, after successive increases from six and a half per cent. in 1902 and 1903 to seven per cent. in 1904 and eight per cent. in 1905.

The circulation of the bank increased gradually until the period of restriction in 1907. It was £832,320 at the close of 1899 and advanced to £1,177,794 for 1904 and £1,181,760 for 1906, but fell to £1,080,763 at the close of 1907. Total assets at the close of 1899 were £15,998,079; for 1904, £19,976,384; for 1906, £22,397,344; and for 1907, £21,023,669.[3]

[1] London, *Bankers' Magazine*, August, 1908, LXXXVI., 138.

[2] *Économiste Français*, July 18, 1908, 118.

[3] *Cf. Moniteur des Intérêts Matériels*, July 5, 1907, 2235, and London *Bankers' Magazine*, August, 1908, LXXXVI., 257.

CHAPTER XIII.

THE BANK OF THE UNITED STATES.

Banks of Issue before the Adoption of the Constitution—Hamilton's Plan for the First Bank of the United States—The Struggle over a New Charter—The Second Bank of the United States: Its Early Errors and its Economic Services—The Bank Dragged into Politics by Jackson and Clay—Jackson's Triumph and the Removal of the Deposits—The Independent Treasury System.

THE pathway of American colonial history is thickly strewn with the failures of government paper money, which might have afforded an instructive lesson to the Continental Congress against its issues of Continental bills. Several cases are found also of issues on private banking credit, but they were not based on sound banking principles and do not shine greatly by comparison with the unrestrained issues resting on the fiat of the State. The "Land and Manufactures Bank," established in Massachusetts in 1740, did not pretend to do better than issue notes redeemable in goods, but they stood for a time so much higher than "Massachusetts bills" that, in spite of the hostility of Governor Belcher, merchants specially advertised goods to be sold for "Manufactory bills."[1] In Connecticut in 1733 the New London Society for Trade and Commerce circulated notes which were current until prohibited by the authorities, and in New Hampshire a company of "private gentlemen" attempted to meet the demand for a circulating medium by an issue of bills. Most of these schemes, including that of the specie bank, formed to counteract the

[1] Weeden, 487.

Land and Manufactures Bank, fell under the prohibition of the Joint Stock Companies' Act. This act was passed in England after the bursting of the South Sea Bubble in 1720 and forbade the formation of banking companies without a special charter, but it was not until 1740 that it was declared by Parliament to extend to the colonies.

The history of banks of issue in the United States can hardly be said to have begun, however, until the foundation of the Bank of Pennsylvania. The bank originated in the plan of a number of citizens of Philadelphia to supply the army with rations, and their first bills, issued in 1780, were nothing more than interest-bearing notes payable at a future time. The advances in Continental money made by the shareholders were secured by bills of exchange for £150,000 drawn on the envoys in Europe, but not intended to be negotiated.[1] Approval was given by Congress May 26, 1781, to the plan of Robert Morris for the Bank of North America, with a capital of $400,000, to be increased if desired. Morris arranged with the Bank of Pennsylvania to transfer the foreign bills it was holding to the new bank and paid in cash its claims against the Federation. The charter of the Bank of North America was not actually granted until December 31, 1781, and business was begun January 7, 1782. There was so much doubt of the power of Congress to charter a bank that a charter was obtained April 1, 1782, from the State of Pennsylvania, under which the bank continued to operate until absorbed into the national banking system in 1863. The bank did much to restore order to the chaos of Federation finances and loaned Morris, as Superintendent of Finance, $1,249,975, of which $996,581 was repaid in cash and the remainder by surrendering the bank stock owned by the Federation. The government had originally paid for its stock in silver brought from France, but this silver was infinitely more productive by the skilful management of the bank than it could ever have been if covered into the public treasury. Livingston wrote to Dana December 17, 1782:

[1] Sumner, *Finances of the American Revolution*, II., 22.

Paper is entirely out of circulation, if we except the bank paper, which, being payable at sight in specie, is equal to it in value. So extensive has this circulation been that the managers not long since published a distribution of the first *half-year's* dividend at four and a half per cent. notwithstanding a variety of expenses to which they had been put in the first organization of the bank.[1]

The first Bank of the United States was incorporated by the First Congress in 1791,[2] as a part of the scheme of Alexander Hamilton to strengthen the new Federal government. Those who had opposed the adoption of the Constitution because of its centralizing tendencies, and some of those who had supported it, opposed the granting of the bank charter upon the ground that the Constitution contained no express grant to Congress of the power to establish a corporation. Their argument was that the case fell plainly within the rule subsequently embodied in the tenth amendment to the Constitution, that "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively or to the people." President Washington obtained the opinion of the members of the cabinet before signing the bill. The opinions of Jefferson and Edmund Randolph were adverse to the constitutionality of the measure; but Washington followed the advice of Hamilton, his brilliant young Secretary of the Treasury, and gave the bill his approval.

The capital of the Bank of the United States was fixed at $10,000,000, divided into 25,000 shares of $400 each. The protection of small investors in bank stock was sought by a graduated scale of voting which did not permit more than thirty votes to any shareholder. Foreign shareholders were not allowed to vote by proxy, which practically prevented their voting at all. The number of directors was fixed at twenty-five, who must be citizens of the United States and not more than three-fourths of whom were eligible for re-election. The bank was not forbidden to loan on real estate security, but could not become an owner of real estate

[1] Wharton, *Diplomatic Correspondence*, VI., 146.

[2] Act of February 25, 1791.

(beyond what was needed for banking houses) unless the property came into its hands in satisfaction of mortgages or judgments.[1] The only limitation upon note issues was that which limited all debts other than deposits to the amount of the capital stock. The notes were receivable for dues to the government so long as they were redeemable in coin on demand. The charter was granted for twenty years, with the provision that Congress should not charter another bank within that time. This was far from implying a monopoly of note issues, for the State banks were in no way disturbed in their privileges and methods except so far as the new institution by its example acted as a regulator of the currency. Its large capital and pre-eminent position operated, and were intended to operate, to give it such a commanding position as was occupied by the Bank of England among the country banks of that country.

The charter provided that one-fifth of the capital should be subscribed by the government of the United States, but a loan was to be made to the government equal to the amount subscribed, to be repaid in ten annual instalments of $200,000 each, with interest at six per cent. No other loans were to be made to the government exceeding $100,000 without authority of law. The practical effect of the government holdings of stock was simply to give the bank the note of the government for its final payment, but as the bank was forbidden to deal in its own stock the process of issue of the government stock was somewhat complicated. It would have been useless for the government to draw money from Europe to pay into the treasury of the bank, to be immediately drawn out again and remitted to Europe for charges there. The course adopted was for the Treasurer of the United States to draw bills of exchange on the American Commissioners in Amsterdam for the amount required to

[1] It is significant of Hamilton's growing familiarity with finance that he did not revive the project of the bank of issue based upon landed security which had attracted him a few years before, but laid down in his report the correct theory of a credit currency based upon quick assets.—*Works*, III., 106–107.

pay the bank. The bills were purchased by the bank and warrants issued in favor of the Treasury upon the bank, thereby placing the amount in the Treasury. Other warrants were then issued upon the Treasury in favor of the bank for the amount of the subscription to the stock, which the bank receipted for as paid. The stock having been thus paid for in accordance with law, the bank loaned $2,000,000 to the government in accordance with the act of incorporation by handing over the bills of exchange originally drawn by the Treasury on Amsterdam.[1]

The Bank of the United States was authorized to establish offices of discount and deposit in the several States and $4,700,000 of the capital was reserved for the central bank at Philadelphia. The remainder was divided among eight branches, established eventually at New York, Baltimore, Boston, Washington, Norfolk, Charleston, Savannah and New Orleans. Private subscriptions were required to be paid one-fourth in gold and silver and three-fourths in six per cent. government stocks or in three per cent. stocks. The capital was over-subscribed to the amount of four thousand shares within two hours after the opening of the books. Oliver Wolcott, who afterwards succeeded Hamilton as Secretary of the Treasury, was offered the presidency, but declined, and Thomas Willing of Philadelphia was selected.

The bank was more successful in its commercial dealings than in obtaining prompt payment of its advances to the government. No regular reports were made to the Treasury Department, but the report communicated to Congress by Secretary Gallatin for January 24, 1811, showed resources of $24,183,046, of which the leading items were $14,578,294 in loans and discounts, $2,750,000 in United State six per cent. stock, and $5,009,567 in specie. The leading items of liability were $10,000,000 on account of capital, $5,037,125 in circulating notes, $5,900,423 in individual deposits, and $1,929,999 in United States deposits. The average annual dividends paid up to March, 1809, were over eight per cent.

[1] Bolles, II., 129–30.

The bank made several loans to the government in anticipation of the revenues early in its career. They were not promptly paid and the debt of the government to the bank at the end of 1792 was $2,556,595, which increased at the end of 1795 to $6,200,000. An attempt was made to sell government five per cent. stock, but only $120,000 was realized and it became necessary for the government to part with one of its most valuable assets,—its shares in the bank. The third and fourth instalments of the original $2,000,000 loan to the government were not paid until 1797, when 2160 shares of the government stock were sold at $500 per share (a premium of $100) and the proceeds, $1,080,000, were applied to these two instalments and to other obligations of the government to the bank. Six hundred and twenty more shares were sold soon afterwards for $304,260 and in 1802 the remaining shares were sold at an advance of forty-five per cent. and the government ceased to be a stock-holder. Secretary Gallatin reported in 1809 that the government made a profit of $671,860 on the sale of its shares, besides receiving dividends at the rate of about eight and three-eighths per cent. annually. The aggregate payments by the government, including interest, were $2,636,427, while the proceeds and dividends together were $3,773,580, representing a profit of nearly fifty-seven per cent. on the original investment for the eleven years during which the government was a shareholder.[1]

Opposition to the Bank of the United States did not die out with Washington's administration nor with its large advances to the government. The conception of the functions of a bank which then prevailed is indicated by President Jefferson's letter of July 12, 1803, to Gallatin, in which he declared, "I am decidedly in favor of making all the banks republican by sharing deposits among them in proportion to the dispositions they show." The bank had a steady friend in Gallatin, however, and he not only continued to avail himself of its assistance in the fiscal operations of the

[1] Sen. Ex. Doc. 38, 52d Cong., 2d Sess., 34.

government, but induced Jefferson to approve a bill establishing a branch at New Orleans.

The charter of the bank was to expire in 1811 and the shareholders petitioned in 1808 for a renewal. The proposal was strongly supported by Gallatin in a report of March 9, 1809, reviewing the entire history of the bank. He recommended that the capital be increased to $30,000,000, with a view to lending three-fifths of the amount to the government in case of war, and that the States be allowed to subscribe $15,000,000. The advantage derived by the government from the existing bank he classified under the four heads of safe keeping of the public monies, transmission of public monies, collection of revenue, and loans.[1] Congress was not disposed to adopt so comprehensive a scheme as this, but theoretical opposition to the bank had so far yielded to practical considerations that the terms of a contract were arranged for a new charter, which received the approval of the House on April 21, 1810, by a vote of 75 to 35. It was the fatal incapacity of the Eleventh Congress to take positive action which prevented the taking up of the bill again, and gave the State bankers time to organize an opposition and instruct their senators against re-charter.[2]

The charter was opposed at the next session not only by the advocates of strict construction of the Constitution, but by party factions opposed to Gallatin in the Cabinet and the Senate. William Duane and Michael Leib had attempted to dictate the Federal appointments in Philadelphia and upon Gallatin's refusal to submit became his bitter enemies. They were supported in the bank contest by a Maryland clique headed by Robert Smith, the Secretary of State, and Senator Samuel Smith, his brother. The fact that about 1800 of the 2500 shares were held abroad was made the occasion of bitter attacks upon the bank. A type of this sort of opposition was the speech of Mr. Desha of Kentucky, in the House on February 12, 1811, in which he declared that this accumulation of foreign capital was one of the engines for

[1] Stevens, 261.

[2] Adams, V., 208.

overturning civil liberty and that he had no doubt George III. was a principal stock-holder and would authorize his agent in this country to bid millions for a renewal of the charter.[1] Gallatin had anticipated this ground of hostility in his report to Congress. He called attention to the fact that the foreign shareholders had no vote and that if the charter was not renewed the principal of the foreign holdings would have to be remitted abroad in liquidation of the affairs of the bank.

William H. Crawford of Georgia was the champion of Gallatin and the bank in the Senate and his able argument commended him to the administration and made him a strong candidate in later years for the presidency. Henry Clay held that Congress had no power to create the bank or to continue it, and followed the leanings of Mr. Desha in the opinion that in case of war with England "the English premier" would exercise control over the institution. The House on January 24, 1811, postponed indefinitely the bill for renewing the charter by a vote of 65 to 64. The vote in the Senate on February 20th was 17 to 17, and the Vice-President, George Clinton, an enemy of Gallatin, gave the casting vote against the bill. "The necessity for such an institution," says Mr. Henry Adams, "was merely one of the moment, but in the period of national history between 1790 and 1860, the year 1811 was perhaps the only moment when destruction of the bank threatened national ruin."[2] The government was compelled to rely in the war of 1812 on the State banks, and their suspension of specie payments in 1814 almost paralyzed the operations of the Treasury. It became impossible to make transfers of funds from one part of the Union to another, because the notes of the banks of one section did not pass current in other sections. Gallatin has left on record the opinion that the suspension of specie payments in 1814 "might have been prevented at the time when it took place, had the former Bank of the United States been still in existence." He believed that the bank would have

[1] White, 265.

[2] *History of the United States*, V., 329.

aided the treasury and that "both acting in concert would certainly have been able at least to retard the event; and, as the treaty of peace was ratified within less than six months after the suspension took place, that catastrophe would have been altogether avoided."

The necessity for means of carrying on the war with Great Britain led to a great variety of odd proposals in Congress after the suspension of 1814. One of the crudest of these was a plan of ex-President Jefferson's, communicated to President Madison, to issue $20,000,000 in government promissory notes annually as long as might be necessary and to appeal to the State legislatures to relinquish the right to establish banks. Dallas, who succeeded Campbell as Secretary of the Treasury on October 6, 1814, indicated indirectly his opinion of this scheme by recommending a new bank and remarking that "The extremity of that day cannot be anticipated when any honest and enlightened statesman will again venture upon the desperate expedient of a tender law."[1] The plan of Dallas, as set forth in his report of October 17th, was for a bank with a capital of $50,000,000, empowered to lend $30,000,000 to the Treasury. There was a provision in the bill reported, authorizing the suspension of specie payments at the discretion of the President of the United States, and it was fallen upon by Daniel Webster in a speech of great power and eloquence. He urged the creation of a bank for commercial purposes rather than one involved at the outset with the government. The result of his attack was the defeat of the bill by a tie vote, which was then reconsidered and the bill sent to a select committee. Amendments were adopted which met Mr. Webster's views, but in this form the measure did not meet the wants of the Treasury. It passed the House, 120 to 38, and the Senate, 20 to 14, but was vetoed by the President on January 30, 1815. Another effort was made to pass the Dallas bill, but it failed in the House on February 17th by a majority of one vote.

[1] Adams, VIII., 245-49.

The evils of the currency had not been remedied when Congress met again in December, 1815, and President Madison suggested a national bank as a suitable instrument for promoting specie payments. Secretary Dallas submitted a detailed plan for the bank, which was adopted by Congress with little change. The capital of the new bank was fixed at $35,000,000, of which one-fifth was to be subscribed by the government in money or in its own obligations. The government subscription was by a stock note, which was not fully paid up in cash until 1831. The public funds were to be deposited in the bank, "unless the Secretary of the Treasury shall at any time otherwise order and direct; in which case the Secretary of the Treasury shall immediately lay before Congress, if in session, and if not, immediately after the commencement of the next session, the reasons for such order or direction." Twenty-five directors were to be chosen, five to be named by the President, and the notes of the bank were made receivable in all payments to the United States. The bank was again given duration for twenty years and no other bank was to be established within this time by Congress outside the District of Columbia. This privilege, as in the case of the first bank, carried with it no restrictions upon the State banks of issue except such as the new bank was expected to exercise by its moral and financial influence towards the restoration of specie payments. A bonus to the government was required of $500,000 annually for three years after the end of the second year.

The progress of public opinion in favor of the implied powers of the Federal government under the Constitution is indicated by the attitude of Madison and the democratic party towards the incorporation of the second Bank of the United States. Madison as a member of the First Congress had opposed the incorporation of the Bank of the United States upon constitutional grounds, and in 1799 had alluded to it as one of the examples of the usurping tendencies of the Federal government;[1] but as President in 1814 and 1815

[1] Von Holst, I., 388.

he was willing to treat the constitutional issue as *res adjudicata*. More surprising is the fact that Calhoun, in later years the hair-splitting logician of strict construction and the champion of nullification, was found foremost among the supporters of the charter of the second bank. He reported the bill to the House and suggested that if the bank by its financial policy was unable to compel the State banks to return to specie payments, Congress might resort to stronger measures, which were within their power. Both Calhoun and Webster favored the refusal by the government of the notes of suspended banks and the collection of all government dues in specie.[1] Webster secured an amendment to the bank bill, requiring the payment of deposits as well as notes in specie, subject to a forfeit of twelve per cent. on the amount for which specie payment was refused.

The constitutional question had thus been decided by the legislative branch of the government before it reached the Supreme Court in 1819. That court, in the celebrated case of McCulloch vs. Maryland, in which the decision was rendered by Chief-Justice Marshall, decided that the power to create a national bank, to assist in carrying on the fiscal operations of the government, was within the implied powers of the Constitution. Equally important was the decision upon the direct issue raised in that case, whether the States could constitutionally levy taxes upon the circulating notes or the property of a national bank. Representative Fiske of New York, in a strong speech in favor of the renewal of the first charter in 1811, declared that the States, in order to give the preference to their own paper, might exclude that of any other State from circulation within their limits by taxation.[2] He did not suggest that they might pursue the same policy towards the notes of a national bank, but this position was taken by the State of Maryland towards the notes of the second Bank of the United States, and the case was carried to the Supreme Court. A decision in favor of the right of the States to have taxed the circulating notes of

[1] White, 278.

[2] Bolles, II., 150.

the United States or of corporations chartered under its laws, would have precluded forever the creation of a national currency, issued either by the government or by national banks. Indeed, if the Federal government had not the power to withdraw its creations from discriminating legislation by the States, Chief-Justice Marshall declared, they might tax the mail or the mint, the papers of the custom house, or the forms of judicial process.[1]

The question of the existence of the bank in the face of discriminating State taxation was not an academic one in 1818 and the following years, but one which was severely practical. The efforts of the bank to drive the State notes from circulation, and especially its later contraction of discounts when it found itself on the verge of bankruptcy, caused commercial distress and made the bank exceedingly unpopular. North Carolina laid a tax of $5000 per year on the branch at Fayetteville. Kentucky, Tennessee, Ohio, and Maryland laid taxes on circulation or on the branches as such. The Maryland act required the purchase of stamped paper for the printing of the circulating notes or the annual payment of $15,000 by the branch at Baltimore. The branch continued to issue notes on unstamped paper and the cashier, William McCulloch, was sued for debt and gave his name to one of the most celebrated of American constitutional cases.[2] Chief-Justice Marshall, in rendering his decision, admitted that the States possessed unimpaired the power of taxing the people and property of the State and that it might tax the real property of the bank in common with other such property within the State, and might tax the interest of citizens of Maryland in the bank; but he declared that the Constitution of the United States placed beyond the reach of State power all the powers conferred on the government of the Union and all the means given for the purpose of carrying those powers into execution.[3]

[1] 4 Wheaton, 316.

[2] McMaster, IV., 497.

[3] Following this decision, all securities of the United States have been held free from taxation by the States unless with the consent of

The Bank of the United States was badly managed during the first years of its existence and in the summer of 1818 was upon the verge of insolvency. The bank began business January 7, 1817, and violated its charter from the outset. The proportion of specie required to be paid in on the second and third instalments was not paid and the bank loaned money to stockholders on the pledge of their stock and personal notes. Trading in shares before they were paid for pushed up the quotations and the bank loaned on the increased value when other nominal security was furnished in the form of mutual indorsements. The Baltimore branch was practically wrecked by its managers, with a loss of $1,671,221. The policy adopted for restoring specie payments was also defective. An arrangement was made with the leading banks of New York, Philadelphia, and Richmond for the resumption of specie payments by them on February 20, 1817. The public deposits in these banks, which the government had been unwilling to accept in depreciated bank paper, were to be transferred to the Bank of the United States, but checks on the State banks which were parties to the agreement received by the Bank of the United States were to be credited as cash. Arrangements were also made for liberal discounts by the new bank, in order to relieve the local banks from the commercial pressure.

These features of the resumption policy were not subject to criticism and $7,472,419 in public funds and $3,336,491 in special deposits were transferred from the State banks to the

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the United States. The national banks created under the Act of June 3, 1864, for many years availed themselves of this condition to have as large a proportion of their reserves as possible in United States notes at the times when their property became subject to assessment for taxation under State laws. This practice led to an act of Congress in 1894, authorizing the States to tax such notes at the same rate as other money. It was long held that the instruments of State sovereignty were exempt from Federal taxation upon the same grounds that the instruments of Federal sovereignty were exempt from State taxation, but this view was overruled in regard to the circulating notes of State banks in the case of Veazie Bank *vs.* Fenno, 8 Wall., 533. See Kent, I., 429, note.

central bank at Philadelphia. Eighteen branches of the Bank of the United States were established and the notes issued were received for government dues without reference to the place of issue and were redeemable, wherever issued, by the central bank or any of its branches. The mistake made by the new bank was in directing the branches to push their own notes into circulation in place of those of the State banks, and to issue drafts on the Eastern cities to prevent the remittance of their own notes. The notes of the local banks were locked up in the Bank of the United States and interest charged upon them to the local banks, but both the notes of the branches and the branch drafts were remitted eastward by the operations of trade. The notes of the Western branch banks which were remitted to the East thus exercised no controlling influence over the volume of Western business, for they were not presented for redemption in the West. What made the matter worse was the necessity imposed in many cases on the branches, in view of the eastward movement of their own notes, to pay out again the local notes in the granting of discounts.

The Western branches paid but limited attention to the instructions of the parent bank to diminish their discounts, even after the danger of their policy became apparent. They issued what were known as "race-horse bills," by which drafts were made by one branch upon another, which were met when due at the accepting bank by new drafts upon some other branch. The bank imported $7,311,750 in specie from Europe during its first two years at a cost of $525,247,[1] but the drain upon its resources had reduced the specie in Philadelphia on April 21, 1819, to $126,745, of which $79,125 was owed to the city banks of Philadelphia.[2] The facts regarding the mismanagement of the bank were brought out by the report of a committee of Congress in 1819 and caused many demands for the repeal of the charter. Langdon Cheves was elected President, March 6, 1819, and he adopted heroic measures to restore the bank to solvency.

[1] Poor, 486.

[2] Bolles, II., 326.

He borrowed $2,500,000 in specie of the Barings, who were considerable holders of the bank stock, forbade the issue of notes in the South and West when exchanges were against the branches, which was almost invariably the case, and in dealings with the government insisted upon the interval between the transfer of funds and their disbursement which was actually required for the transfers. The bank was saved and was conducted with comparative prudence until the breaking out of the war with President Jackson.

The second Bank of the United States undoubtedly contributed for more than a decade to facilitate the transfer of funds from one part of the country to another and to maintain a uniform circulation equal to coin. The rates of domestic exchange, which were necessarily high because of the imperfect means of communication, were materially reduced by the bank. Its policy greatly benefited commerce, but invited bitter complaints from the private dealers in exchange, who had been enabled to make excessive profits while the currency was below par because of its different values in different States and the constant fluctuations in these values. The bank, in the language of the report of Senator Smith of Maryland in 1832, furnished "a currency as safe as silver, more convenient, and more valuable than silver, which through the whole Western and Southern and interior parts of the Union, is eagerly sought in exchange for silver; which, in those sections, often bears a premium paid in silver; which is, throughout the Union, equal to silver, in payment to the government, and payments to individuals in business." Mr. McDuffie, who submitted the minority report in the House at the same time, declared that "The whole business of dealing in domestic bills of exchange, so essential to the internal commerce of the country, has been almost entirely brought about within the last eight years. In June, 1819, the bank did not own a single dollar of domestic bills; and in December, 1824, it owned only to the amount of $2,378,980; whereas it now owns to the amount of $23,052,972." [1]

[1] House Rep., 460, 22d Cong., 1st Sess., 312.

One of the most serious charges of evasion of law, brought against the bank in 1832, was in the issue of branch drafts to circulate as currency. Several appeals were made in vain to Congress to modify one of the provisions of the charter requiring the president and principal cashier to sign all the circulating notes. The volume of circulation necessary to do business was so great that the physical labor of signature could not well be performed by those officers. Congress neglected to act and in 1827 an opinion was obtained from Horace Binney, in which Daniel Webster and William Wirt concurred, that there was no legal obstacle to the issue of checks drawn by officers of the branches upon the parent bank, printed for even amounts in similar form to bank-notes. Drafts of this sort for $5 and $10 were authorized by the board of directors on April 6, 1827, and denominations of $20 were issued in 1831. They became a common medium of circulation in the South and West and were accepted in payments to the United States Treasury.[1] The branch drafts outstanding in April, 1832, were $7,410,090. They simply served the purpose of currency without conforming strictly to the intent of the law, in much the same manner as the checks of the London Cheque Bank or the temporary issues in the United States during the panic of 1893.

The Bank of the United States fell because so great an institution in a representative republic could not escape political entanglements and the suspicion of the abuse of political power. President Jackson surprised the financial world by the announcement, in his first annual message in 1829, that "Both the constitutionality and the expediency of the law creating the bank are well questioned by a large portion of our fellow-citizens; and it must be admitted by all, that it has failed in the great end of establishing a uniform and sound currency." The bank was at this time under the presidency of Nicholas Biddle, who succeeded

[1] Letter of Sec. Rush to Nicholas Biddle, Jan. 21, 1820. House Rep., 460, 22d Cong., 1st Sess., 55. The authority to receive these drafts for public dues was revoked by Secretary Woodbury, to take effect January 1, 1835.

Cheves in 1823, and was one of the most imposing institutions of the country. The President's message, therefore, was in the nature of a thunderbolt from a clear sky. Jackson's hostility was due to a complaint by Isaac Hill, a New Hampshire politician who had been made Second Comptroller, that Mr. Mason, the manager of the branch at Portsmouth, New Hampshire, had shown partiality to the political opponents of General Jackson and that his conduct had been "calculated not less to injure the institution than to disgust and disaffect the principal business men." "No measure short of his removal," in Hill's opinion, "would tend to reconcile the people of New Hampshire to the bank."

The truth appears to have been that Mason had excited hostility by his energetic contraction of discounts at Portsmouth and his efforts to correct previous mismanagement. Levi Woodbury, who had defeated Mason for the United States Senate in 1824, addressed a letter early in July, 1829, to Mr. Ingham, the Secretary of the Treasury, making complaints against Mason's management, which Ingham forwarded to President Biddle for his consideration. Biddle was a ready writer, he occupied one of the most powerful positions in the country, he was surrounded by flatterers and sycophants, and he was quickly entrapped into a quarrel which resulted in the overthrow of the bank. He not only denied that the bank had shown political favor at Portsmouth or elsewhere, but went out of his way to declare that the governing board acknowledged no responsibility whatever to the Secretary of the Treasury in regard to the political opinions of the officers of the bank and that it was carefully shielded by its charter from executive control. So fixed had become the relations between the bank and the Treasury in the handling of public monies, and so much a matter of mere routine, that Biddle appeared to overlook the possibility of the withdrawal of the public deposits. He evidently had no realizing sense of the danger which hung over his head or of the spirit of hostility which was being aroused in the mind of Jackson.

The President's suggestions in his annual message excited the fear for a moment that he had information which was not known to the public and bank shares dropped from 125 to 116, only to recover to 130 after a report by a committee of Congress. The portions of the message relating to the bank were referred to committees in both houses, both of which exonerated the bank from the charge of bad management and condemned the suggestion of the President, whether a national bank, "founded upon the credit of the government and its revenues, might not be devised which would avoid all constitutional difficulties, and at the same time, secure all the advantages to the government and country that were expected to result from the present bank." The House on May 10, 1830, tabled, by a vote of 89 to 66, resolutions that the House would not consent to the renewal of the bank charter and on May 29th tabled, by a vote of 95 to 67, resolutions calling for a comprehensive report of the proceedings of the bank.[1] Similar votes in favor of the bank were given in the Senate. The President was mild in his allusions to the subject in the annual messages of 1830 and 1831 and the Secretary of the Treasury was even allowed in the latter year to incorporate in his annual report a strong argument in the bank's favor. It is not improbable that Jackson might have been persuaded by the eminent financiers of his party to consent to a re-charter if the matter had not been made an issue by Henry Clay in the presidential campaign.

The political dangers of a great central bank were demonstrated in the campaign of 1832. President Jackson had given the country in the main a firm and successful administration and it was necessary for Clay and the Whigs to create political issues upon which to make a respectable contest against him. There were dangers in making the tariff the controlling issue, because different Whig States were on both sides of the question. Clay determined to make the campaign upon the issues of internal improvement and the recharter of the bank. It was natural that he should

[1] Sumner, *Andrew Jackson*, 247.

accept the sentiment of the financial portion of the community in favor of the bank as the sentiment of the whole and he was so confident of success that he feared Jackson would evade the issue. The resolutions adopted at Baltimore on December 12, 1831, at Clay's instigation, declared that the President, "is fully and three times over pledged to the people to negative any bill that may be passed for rechartering the bank." Biddle and the real friends of the bank who were not politicians protested strongly against making the recharter a party issue, but Clay forced them to the choice between sustaining his party as the friends of the bank or going without political friends. Professor Sumner declares that "Jackson never was more dictatorial and obstinate than Clay was at this juncture." [1]

The fight was opened in the Senate on January 9, 1832, when Senator Dallas presented the memorial of the bank for the renewal of its charter. Biddle came to Washington, opened headquarters, gave sumptuous entertainments, and defended the bank vigorously before the committee of investigation appointed by Congress. The bill for the recharter was passed through both houses, only to encounter a veto message from President Jackson on July 10th. The issue was thus made up for the presidential election, exactly as Clay desired it, but the response of the people was 219 electoral votes for Jackson, 49 for Clay, and 18 for all others. The executive triumphed, as usual in a contest with Congress, and the doom of the bank was decided.

The bank had five years of life before it. Its credit was good and it still held the public deposits. It was not generally supposed that these would be withdrawn until near the date for the termination of the charter, as had been the case with the public deposits in the first Bank of the United States. Jackson's blood was now up, however, and he needed no further stimulus to crush his enemy. The bank made two serious blunders during 1832 and 1833 in its relations with the Treasury. It undertook to make a private arrangement with the Barings regarding the payment of

[1] *Andrew Jackson*, 257.

$5,000,000 of government three per cent. securities, which the Secretary of the Treasury had notified the President of the bank as early as March 24, 1832, would be paid from the surplus revenues. A contract was made through a private agent of the bank for extending these securities, which were to be assumed by the bank and the interest paid to the government. The object was to retain possession of the public money, on deposit with the bank, which was worth seven per cent. in the discount market, rather than permit it to be withdrawn for the redemption of the debt. When the circular of the Barings got into the newspapers in October, Biddle was obliged to disavow the contract and made a lame explanation to Secretary McLane for seeking to delay the payment. The other case was the attempt to collect damages upon the amount of a bill of exchange drawn upon the French government, which was refused payment by the French Minister of Finance, because the money had not been appropriated by the Chambers. The bill was taken up by the Paris agents of the bank, and charged against it. Secretary McLane paid the principal, $961,240, which had been covered into the Treasury, back to the bank and offered to pay actual costs. The bank insisted upon fifteen per cent. damages, under a law of the District of Columbia relating to protested paper, and deducted the amount from the government dividends. The government sued and the Supreme Court decided against the bank.

Performances like these on the part of President Biddle convinced Jackson that the bank was weak and confirmed his purpose to suspend the further deposit of public monies in its custody.[1] Mr. McLane was transferred from the Treasury to the State Department during the spring of 1833 and William J. Duane of Pennsylvania was made Secretary of the Treasury. Duane was a conservative and able lawyer, with little of the politician in his make-up, and when

[1] Jackson also believed that if the bank retained the public funds, it would be able to buy up the votes in Congress necessary to make two-thirds and pass a recharter bill over his veto.—Sumner, *Andrew Jackson*, 299.

the President insisted upon his suspending deposits in the Bank of the United States and making them in future in the State banks, Duane refused to comply and the President removed him from office. Roger B. Taney, who afterwards became so odious in the free States as Chief Justice of the Supreme Court, was transferred from the Department of Justice to the Treasury on September 23d, and began the deposit of the public funds in the State banks.

The contest which followed in Congress belongs to the history of politics rather than that of finance. The Senate rejected the nomination of Taney for Secretary of the Treasury and rejected the President's nominees for government directors of the bank, apparently upon the remarkable ground that they were disposed to insist upon too accurate a knowledge of the bank's affairs. The Senate called for the paper which Jackson had read in the cabinet regarding the removal of the deposits on September 18th, and received the reply that the Senate had no constitutional right to interrogate him on the subject of his communications with his heads of departments. Clay introduced a resolution which was passed on March 28, 1834, by a vote of 26 to 20, declaring that the President had, "assumed upon himself authority and power not conferred by the Constitution and the laws, but in derogation of both." The President sent a protest against this resolution to the Senate on April 17th, which that body ten days later voted, 27 to 16, was a breach of the privileges of the Senate and should not be entered on the journal. The friends of Jackson appealed to the people and gained enough seats in the Senate to pass resolutions on January 16, 1837, expunging the previous resolutions from the records.

The Bank of the United States obtained a charter from the State of Pennsylvania on February 18, 1836, for thirty years. The bank agreed to pay a bonus of $2,000,000 to the State and $100,000 per year for thirty years, besides various subscriptions to the stock of transportation routes, which Benton described as bribery of the legislature and the people. The shares in the bank owned by the United States, amounting to $7,000,000, were paid in four annual instalments at

the rate of 115.58. New stock was sold to replace the government stock, leaving the capital intact at $35,000,000. The capital was too large for local commercial needs and Biddle branched out into loans on stocks of uncertain value, many of which proved worthless after the crisis of 1837. The bank suspended at that time with the other banks of the country, but was compelled to suspend again in 1838, and again in 1841, after which it went into liquidation. The creditors were paid, but the shareholders lost their entire interest. Biddle had resigned in March, 1839, leaving the bank, according to his view, in a prosperous condition. He was indicted during the liquidation for conspiracy to defraud the shareholders. The indictment was quashed, but Biddle was ruined financially and died within five years insolvent and broken-hearted.[1]

The principal items in the accounts of the second Bank of the United States up to the time of its final suspension are shown in the following table :

YEAR.	LOANS.	DEPOSITS.	CIRCULATION.	SPECIE.
1820	$31,401,158	$ 6,568,794	$ 3,598,481	$ 3,392,755
1830	40,663,805	16,045,782	12,924,145	7,608,076
1834	54,911,461	10,838,555	19,208,379	10,039,237
1835	51,808,739	11,756,905	17,339,797	15,708,369
1836	59,232,445	5,061,456	23,075,422	8,417,988
1837	57,393,709	2,332,409	11,447,968	2,638,449
1838	45,256,571	2,616,713	6,768,067	3,770,842
1839	41,618,637	6,779,394	5,982,621	4,153,607
1840	36,839,593	3,338,521	6,695,861	1,469,674

The present method of dealing with public monies in the United States is one of the results of the war over the United States Bank. Secretary Taney, under Jackson's instructions, deposited public money in certain State banks,—most of them selected because their officers were friendly to the administration and characterized by its critics as the "pet banks." The government imposed upon them the conditions of giving security in certain cases, of issuing no small

[1] Sumner, *Andrew Jackson*, 342.

notes and of keeping one-third of their reserve in specie.[1] The State banks undertook by mutual agreement to honor each other's notes and drafts, but the crisis of 1837 caused a general suspension and the payment of $25,000,000 of the deposits in bank-notes bearing an average depreciation of ten per cent. Secretary Taney in his report for 1834 urged legislation to sanction the use of the State banks as depositaries, but the bill prepared on the subject failed in the Senate. The suspension of the banks in 1837 led President Van Buren, in his annual message of that year, to recommend that the public funds be kept exclusively by public officers and that nothing but specie be received for dues to the government. This plan—embodying substantially the features of the present independent treasury system—was several times defeated, but was finally enacted June 30, 1840. One-fourth of all dues to the Treasury were to be paid at once in specie, and an additional fourth each year until the whole were thus paid.

The success of Harrison and the Whigs resulted in the repeal of the independent treasury law August 13, 1841, and two national bank bills were passed, only to be successively vetoed by President Tyler. The public monies were deposited in the banks or not, at the discretion of public officials, until 1846, when the independent treasury system was again established by authority of Congress. The policy of refusing State bank-notes for government dues continued until the creation of the national banking system during the Civil War. That system gave the government the security of its own bonds for the bank-notes, and the national banking act provided that the notes should be "received at par in all parts of the United States in payment of taxes, excises, public lands, and all other dues to the United States, except for duties on imports; and also for all salaries and other debts and demands owing by the United States to individuals, corporations, and associations within the United States, except interest on the public debt, and in redemption

[1] Kinley, 17.

of the national currency."[1] The national banks were again made the depositaries of public money during the first administration of President Cleveland, but were required by the Secretary of the Treasury to deposit United States bonds as security for such monies in much the same manner as for the security of national bank-notes. The amount of deposits in the banks on August 1, 1888, when Secretary Fairchild made a report on the subject to Congress, was $54,475,055, exclusive of $4,052,021 on deposit to the credit of disbursing officers. The number of banks among which these deposits were distributed was about three hundred and the largest deposit was $1,100,000. The policy of Secretary Windom and the absorption of the surplus reduced these deposits after 1892 and their entire amount on January 2, 1896, was $14,271,280.[2] The independent Treasury continues to transact the bulk of the public business and sub-treasuries are maintained at New York, Philadelphia, Boston, Baltimore, Cincinnati, Chicago, St. Louis, New Orleans, and San Francisco.

[1] Act of June 3, 1864, Sec. 23.

[2] The resumption of the deposit policy in 1902 is described *infra*, 436

CHAPTER XIV.

THE STATE BANKING SYSTEMS.

The Condition of the Country When They were Adopted—Success of the Suffolk System and of Banking on General Assets—The New York Safety Fund and Security Systems—Unhappy Experience in the West and South with Banks of State—The Effects of the Civil War—Failure of the Security System—General Statistics of the State Banks.

THE systems of banking authorized under the laws of the various States of the United States offer examples of nearly every form of note issues and every degree of success or failure. The economic development of the country between the Revolution and the Civil War was in an experimental stage as well as its political development. The rules of sound banking had not yet been worked out even in the older countries of Europe, as the mistakes and failures of English, French, and Austrian banking abundantly show; but to ordinary sources of error and risk were added in the United States the elements of experiment and uncertainty in every department of human activity. The Englishman or Frenchman might not be a good banker, but he could at least form an intelligent estimate of the volume of trade with which he had to reckon and the conditions under which it was carried on. His problem was simply to work out, according to sound rules, a mathematical problem for which the necessary elements were known. With the American, on the other hand, every element was an unknown quantity. He had to guess at the first element in his equation, and if he guessed wrongly absolute accuracy in

his further computations could not possibly yield a true result.

A new country, poor in specie and in loanable capital, is almost forced by the necessities of her situation to adopt monetary devices which would not be tolerated under better conditions. Some of these devices would be comparatively harmless if their true character were understood and they were used with moderation ; but their tendency is misleading and intoxicating to the average mind and they are usually so abused as to offset the little benefit which might be derived from them. The most successful banking systems under State law in the United States were those of New York and New England, where the surplus capital of the country in the earlier days was concentrated. The least successful systems were in the newer and poorer sections of the country and they grew progressively worse as inexperience and poverty seemed to make more imperative the necessity for creating something out of nothing. Four distinctly marked systems of note issue were in operation in the United States side by side almost up to the close of the Civil War and it is not surprising that the conglomerate currency which they created has left unsavory memories behind it. These four systems were : Issues upon general assets ; issues protected by a general safety fund ; issues based upon public securities ; and issues based upon the faith and credit of the States.[1]

[1] The principal sources for the preparation of this chapter have been the monographs prepared by Mr. L. Carroll Root for the "Sound Currency Committee" of the New York Reform Club ; the report of John J. Knox, the United States Comptroller of the Currency, for 1876 ; the report prepared by Mr. Henry H. Smith, Assistant Register of the Treasury, in response to Senate resolutions of July 26, 1892, printed as Sen. Ex. Doc. 38, 52d Cong., 2d Sess. ; and the report of Comptroller A. B. Hepburn for 1892. The investigations of these gentlemen have brought together and co-ordinated a mass of material which would otherwise have to be sought with great labor from a variety of sources. Mr. Root has further favored me with an examination of this chapter and the suggestion of some changes, which I have adopted.

The best illustration of the system of banking upon general assets is afforded by the banks of New England, and especially by the banks of Boston, which became the centre of the New England redemption system. The note issues of the New England banks were permitted in many cases to exceed the proportion to capital which is now considered safe, and they were not subject until late in their history to thorough official supervision; but in spite of these defects of the system, the notes usually circulated at par and specie was attracted to New England when driven from other sections of the country by depreciated paper. The first local bank in New England, and the second of the kind in the United States, was incorporated by act of the General Court of Massachusetts on February 7, 1784, with a maximum capital of $300,000, and was called the Massachusetts Bank. No limitations were imposed in the original Massachusetts law upon note issues, but an act of 1792 prohibited notes below $5, and the bank was directed to limit the amount of notes, together with "money loaned by them by a credit on their books or otherwise," to "twice the amount of their capital stock in gold and silver, actually deposited in the banks and held to answer the demands against the same." A general law was passed in 1799, prohibiting banking by unincorporated companies or the further issue, except by the Nantucket Bank, of notes below $5. This provision was modified in 1805 so as to permit the issue of bills of $1, $2, and $3 to the amount of five per cent. of paid-up capital. This limit was increased in 1809 to fifteen per cent., reduced in 1812 to ten per cent., and again increased in 1818 to twenty-five per cent., which remained the limit during the life of the State banking system.[1]

An act was passed in 1803, requiring semi-annual reports of condition by the Massachusetts banks to the State officials, and it appeared that at that time seven banks were in operation with a capital of $2,225,000 and a circulation of $1,565,000. An attempt was made in 1811 to found a State

[1] Root, *New England Bank Currency*, "Sound Currency," Vol. II., No. 13, p. 4.

bank occupying a similar relation to the Commonwealth that the United States Bank had occupied towards the national government, but the State capital was never subscribed and the authorized capital was reduced in 1817 from $3,000,000 to $1,800,000.[1] The charter of this bank and of the Merchants' Bank, also incorporated in 1811, served as the model from which most subsequent charters in Massachusetts were drawn. One-fifth of the capital was required to be actually paid in before the beginning of business; the stockholders were individually liable to the amount of their stock in case of loss arising from mismanagement, and the liabilities, exclusive of deposits, were limited to twice the amount of the capital. The limit upon circulation, which was thus incidentally imposed, was reduced in the case of most of the later banks to 150 per cent.

The Massachusetts and other New England banks maintained specie payments in 1814, when those of other parts of the country suspended, and the current of specie towards New England swelled the holdings of the Massachusetts banks alone, from $1,513,000 in 1811 to $6,946,542 in 1814. The total banking capital authorized had increased in 1828 to $9,075,000 and thirty-six new banks were incorporated in the four years ending with that date. A new banking law was passed on February 28, 1829, which applied to banks thereafter incorporated and to those obtaining an increase of capital or an extension of their charters. The limit of the notes which a bank might circulate was reduced to 125 per cent. of the capital and the total of the debts, exclusive of deposits, was limited to twice the capital. A provision was made against the practice of issuing notes promising pay-

[1] The State subscribed $400,000 to the capital of the Union Bank of Boston, which was incorporated in 1792, and was generally a subscriber at the formation of new banks for the next twenty years. About $1,000,000 of bank stock in this way came into the hands of the State and afforded a generous dividend until it was sold in 1812 to meet some unusual expenses. The State does not seem to have abused its share in the ownership by interference with the management of the banks.—Martin's *Boston Stock Market*, cited in Comptroller's Report for 1876.

ment with interest at a future date, by which the banks had endeavored to escape the obligation to pay cash on demand to depositors and note-holders. An effort was made to evade this provision by issuing deposit books, making the same promise. They were first issued mainly to depositors, but they came to be extensively issued during the pressure of 1834 in discounting paper. The General Court passed a law in that year prohibiting the practice.

The organization of banks in Massachusetts proceeded with alarming rapidity during this period of speculation, and at the end of 1836, seventy-eight new banks had been added to the sixty-two older banks, and forty-three of the latter had obtained an increase of capital. Several banks succumbed towards the close of the year, but the Boston banks were mainly sound and followed the New York banks reluctantly on May 12, 1837, in the suspension of specie payments. An act of 1809 imposed a penalty of two per cent. a month on banks which failed to redeem their notes in specie. This provision was not enforced in 1837, and the General Court suspended it until January 1, 1839, in the case of banks which kept their circulation within seventy-five per cent. of their capital, redeemed notes below $5 in Boston, and below $3 elsewhere, and complied with some other conditions. Voluntary resumption took place throughout the State on August 13, 1838. Failures still continued among the mushroom institutions which had been created during the period of speculation, and thirty-two Massachusetts banks wound up their affairs between 1837 and 1844. The necessity of more efficient supervision by the State was made plain by the crisis of 1837, and three bank commissioners were authorized to make annual examinations of all the banks and special examinations when they thought proper. This law was repealed after five years, but the Massachusetts banks were now upon a sound basis and failures were few during the twenty-five years before the creation of the national system. Only two failures occurred between 1840 and 1855, and the notes in both cases were paid in full.

Most of the bank charters were renewed for twenty years

in 1831 and expired on October 1, 1851. The renewal in the latter year was made the occasion of several changes in the banking laws. One of these revived the board of bank commissioners with the same powers of examination as in 1838. Another change of law imposed liability upon stockholders for the redemption of notes, in case of failure, to the amount of their stock, without the former limitation in regard to mismanagement. The speculative mania which preceded the crisis of 1857 resulted in the creation of fifty-eight new banks in Massachusetts with a capital of $14,400,000 and 157 increases in the capital of existing banks, amounting to $18,745,000. Several failures took place, but the noteholders suffered little loss and a committee of the legislature in 1856 reported against the granting of further charters. The condition of the State banks of Massachusetts in 1862, just before absorption into the national system, showed 183 banks in operation with a capital stock of $67,544,200; circulation, $28,957,630; deposits, $44,737,490; loans and discounts, $127,592,511; and specie, $9,595,530.

The banking systems of the other New England States were generally based upon the principle of issuing notes against assets and the banks maintained close relations with those of Boston. The legislature of Maine took advantage of the expiration of a number of charters in 1846 to adopt some changes of law to afford greater security for circulating notes. The Act of August 10, 1846, provided that for the amount of circulation issued in excess of fifty per cent. of the capital, one dollar in specie should be kept for three dollars in bank-notes and that the total circulation should never exceed the capital plus the amount of specie on hand. The State of Vermont created in 1831 a safety fund modelled closely upon that of New York. Each bank thereafter chartered was required to pay into the State Treasury, in six annual instalments, the sum of four and a half per cent. upon the amount of its capital stock, and in case the fund was reduced by the failure of any bank it was to be restored by assessments by the State Treasurer, not exceeding three-fourths of one per cent. in any one year upon the capital of

the banks. An act was passed by the General Assembly in 1842, relieving the banks from contributions to the safety fund in case the directors should execute satisfactory bonds to redeem according to law all bills issued and to pay deposits on demand.

The banking laws of Rhode Island were peculiar in the facilities which they extended to banks for recovering debts. The first bank charter,—issued to the Providence Bank in 1791, and creating the fifth chartered bank then existing in the United States,—provided that upon any note or other instrument expressly made payable at the bank, the President or certain of the directors might cause a demand to be made upon the debtor, in case of his failure to make payment at maturity, and in case the obligation remained unpaid for ten days, these officers might write to either of the clerks of the courts of common pleas or of the superior court and order such clerk to issue a writ of execution *capias satisfaciendum fieri facias*, and attachment of real estate upon which the debt and costs might be levied, whereupon the clerk was required to issue such an execution, to be served by any sheriff or deputy. Subsequent charters did not even require demand in writing or protest, but authorized the officers of the bank to order the clerk of one of the courts to proceed to issue the execution. This drastic method of collecting debts under the "bank process" made banks very popular investments with capitalists and accounted for their rapid increase up to 1818. An act was passed forbidding the further granting of such charters, but the decision of "the Dartmouth College" case in the Federal courts, denying the power of the grantor of a charter to change the terms except with the consent of the grantee, delayed any provision for withdrawing the powers of the "bank process" from banks already possessing them. The arbitrary character of this process and the hardships it inflicted aroused strong popular feeling and resulted in an act of 1836 abolishing the privileges of "the bank process" and limiting the banks thereafter to the same remedies as individuals for the collection of debts. Sixty-one

banks then existed in Rhode Island, of which thirty possessed the powers of the "bank process."

The peculiar feature of the New England bank circulation was the Suffolk system of redemption, which was established in order to protect sound banking currency from being driven out of circulation by the inferior currency of other States. The suspension of specie payments south and west of New England in 1814 resulted in the introduction of depreciated notes across the Connecticut border and drove the Connecticut bank-notes into private hoards or brought them to the banks for redemption in specie. The banks of Maine encountered a similar situation prior to the suspension of specie payments in 1837. They were forbidden by law to issue notes below $5, with the object of keeping the currency saturated with coin, but this purpose was defeated by the circulation of the small notes of the banks of neighboring States. The banks of Boston found themselves, even before the close of the last century, under somewhat the same competition from the country banks of Massachusetts. The Boston banks at first undertook to send the country notes promptly home for redemption, but the banks protested against this policy. The Boston banks then refused to receive the country notes altogether. The result was the hoarding of "Boston money," which was sold at a small premium to persons having payments to make at the banks, while the channels of circulation were filled with the country notes, which were known as "foreign" or "current money."

Several attempts were made in Boston to establish a redemption office for sending notes home for redemption, but it was not until 1813 that a systematic method of clearing and redemption for bank-notes was put in operation by the New England Bank. The discount on the notes of "foreign" banks was larger than the actual expense of redemption justified, and the New England Bank gave notice that it would charge only the actual cost of sending foreign money home for redemption and obtaining the specie for it. The execution of their plan brought down

the discount on "foreign" notes from four or five per cent. to one per cent. for notes of Massachusetts banks and somewhat more for those of other States.

The Suffolk Bank was incorporated in Boston in 1818 and the directors determined to give special attention to foreign exchanges. A committee appointed to consider the subject in 1819 reported that it was expedient "to receive at the Suffolk Bank the several kinds of foreign money which are now received at the New England Bank, and at the same rates." They recommended that if any bank should make a permanent deposit of $5000 with the Suffolk Bank, with such further sums as were necessary from time to time to redeem its bills taken by the Suffolk Bank, such bank should have the privilege of receiving its bills at the same discount at which they were purchased. They recommended that the banks of Providence and Newport and twenty-three others keeping an account with the Suffolk have the privilege of receiving such of their bills as were received by the Suffolk bank at the same discount as taken, without the permanent deposit of $5000, provided these banks would make all their deposits at the Suffolk Bank and at all times have money to redeem the bills taken.[1] The policy to be adopted towards banks refusing to make a deposit was to send their notes home for redemption. These recommendations were put in force and the lively competition of the Suffolk with the New England Bank soon forced exchange on Massachusetts notes to one-half of one per cent., or even less.

The notes of the Boston banks were still crowded out of circulation by the slight discount on the notes of the country banks and it was found in 1824 that the permanent circulation of the eleven city banks, with a capital of $11,150,000, was not more than $300,000, while the country banks, with a capital of less than $9,000,000, had a circulation of $7,500,000. An agreement was made between the Suffolk and six other Boston banks by which a fund of $300,000 in their notes was furnished the Suffolk, to be paid out in

[1] Whitney, 7–8.

equal proportions in the purchase of country bank-notes.[1] The tendency of this policy was to force the city notes into circulation and withdraw the country notes unless they were maintained absolutely at par by the action of the country banks. The plan was vigorously resisted at first by the country banks and the Boston association was decorated with such opprobrious names as the "Holy Alliance" and "Six-tailed Bashaw." The country banks were forced to yield, however, and most of them consented to make the permanent deposit of $2000 which was now required, in addition to a sufficient sum for current redemptions. The notes of those maintaining their redemption fund were received at par and were charged up against them once a week or as often as might be convenient. The Suffolk Bank charged interest whenever the amount redeemed exceeded the funds to the credit of the issuing bank, but received the notes of all banks in good standing and placed them to the credit of the bank sending them in.

A sort of clearing house was thus established which enabled the issues of one bank to be set off against those of another in making settlements. The effect of restoring the country notes to par was to reduce the circulation of sixteen Massachusetts banks within six months by $382,781 and to increase the circulation of the Boston banks by $283,497. When any bank refused to join the Suffolk system, the Suffolk Bank simply presented its notes for redemption. This course soon convinced the majority of the country banks that it was better to clear through the Suffolk Bank than to maintain an unequal competition with neighboring banks, which had the prestige of belonging to the Suffolk system and whose notes were at par throughout New England. The suspension of specie payments in 1837 put an end to enforced redemption for a time, but the majority of the banks continued to settle their balances through the Suffolk Bank and their bills passed current all over the

[1] John Amory Lowell, who served on the "Foreign Money Committee" for forty-two years, and William Lawrence, prepared this plan and report.

Union, while those of the other banks had only a local circulation. [1]

A branch redemption agency was established in Rhode Island, by which the Merchants' Bank of Providence received at par from the Rhode Island banks the bills of all other banks in New England and settled balances as far as possible among the Rhode Island banks. Bills issued by banks outside of Rhode Island were sent to Boston, and Rhode Island bills were sent in bulk by the Suffolk Bank to Providence. Legal encouragement was given to the Suffolk system in Vermont by the Act of 1842, which levied a tax of one per cent. upon bank capital, but remitted the tax to any bank which should "keep a sufficient deposit of funds in the City of Boston, and should at that city uniformly cause its bills to be redeemed at par." All but three of the Vermont banks were members of the system before 1848 and in 1850 all had joined. Several of the Maine banks resisted for a time and received the support of the bank commissioners in 1837, but their circulation became limited to their immediate locality and the system was commended by the commissioners in later reports.

The handsome profits derived by the Suffolk Bank from the redemption system led to several efforts to establish a rival institution. The work of the Suffolk Bank was so well done that it was not until 1855 that these efforts bore tangible fruit. The Bank of Mutual Redemption was then established for the specific purpose of redeeming the currency of the New England banks at par. The bank went into operation in 1858, with 135 New England banks interested as stockholders and thirty-five keeping a permanent deposit aggregating $143,000. The bank was admitted to the clearing house after a struggle and most of the country

[1] "At the time when the Suffolk system was at its best I lived in Chicago. The notes of Massachusetts banks were in great request there. They were considered the best currency going and they bore a premium over the notes of Illinois and Wisconsin banks." Testimony of Horace White before House Committee on Banking, House Report 1508, 53d Cong., 3d Sess., 84.

banks withdrew from the Suffolk and transferred their deposits to the Bank of Mutual Redemption. There was some friction between the two institutions and it was feared in some quarters that the entire system would be endangered, but a mutual exchange of the notes of their patrons was arranged between the two banks. The Suffolk Bank withdrew from the system on November 1, 1858, upon the ground that "its main feature, the right to send home bills for specie, cannot be given up without destroying its efficacy," and that "under the existing circumstances the bank does not wish to stand in the way of a trial of the attempted experiment of a foreign money system to be conducted on less stringent principles." The Suffolk Bank continued to receive country money at a discount of twenty-five cents per $1000 and to share to this degree in the business of redemption.

The circulation of the New England banks in 1858 was less than $40,000,000 and the redemptions for that year through the Suffolk Bank were $400,000,000. Every note, therefore, on the average, passed through the redemption agency ten times a year, or a little less often than once a month. This frequency of redemptions not only tested the solvency of the banks by the ultimate test of a banking currency, but it kept the circulation constantly adjusted to business conditions. The redemptions through the Suffolk agency were $76,248,000 in 1834 and increased to $105,457,000 in 1837. There were fluctuations during the period of specie suspension, but the redemptions increased progressively to $137,000,000 in 1845, $220,000,000 in 1850 and $341,000,000 in 1855, until they reached their maximum of $400,000,000 in 1858. The expenses of carrying on the redemption agency reached a maximum of $40,000 in 1858, making an average expense of ten cents per $1000. The suspension of specie payments by the banks of the country at the close of 1861, as the result of Secretary Chase's issue of government demand notes, arrested the regularity of redemptions through the Suffolk system and it was superseded before resumption by the National banking system. The Suffolk system was never

sustained by formal law, but it maintained New England bank currency for a generation at par with gold and prevented any losses to note-holders larger than a fraction of one per cent. of the entire volume of circulation.

New York tried two banking systems under which many strong banks were created, but both of which failed in some degree through defects of detail. The early New York banks issued notes against their general assets and were chartered under special acts of the legislature, which were granted to some extent as political favors. The Bank of New York was incorporated by Act of March 21, 1791, after having done business for seven years under articles of association drawn by Alexander Hamilton. This bank retained a practical monopoly in New York City until 1799, when the Manhattan Company began a banking business with a capital of $2,000,000. The charter was obtained by the management of Aaron Burr and would undoubtedly have been refused by the Federalist majority in the legislature if it had been clearly understood that it carried banking powers; but the charter was granted for the avowed purpose of supplying the City of New York with pure water and cloaked the banking power under a general provision permitting the company to employ its surplus in any moneyed transactions not inconsistent with the laws of the State.[1] Six additional banks were chartered up to 1811; nine additional in that and the following year, after the lapse of the charter of the Bank of the United States; and twenty-four more from 1813 to 1825.

Thirty New York bank charters were to expire between 1829 and 1833, and Governor Van Buren in the former year urged upon the legislature a sweeping measure of reform. He presented what is known as "the safety-fund plan," which he stated had been presented to him by Mr. Joshua Forman of Syracuse. Mr. Forman declared that "The propriety of making the banks liable for each other was suggested by the regulations of the Hong merchants in Canton, where a number of men, each acting separately,

[1] Roberts, 477.

have, by a grant of the government, the exclusive right of trading with foreigners and are all made liable for the debts of each in case of failure." Mr. Forman did not propose to extend this principle further than the guarantee of the circulating notes, but by accident or design the bill which passed the legislature made the safety fund liable for all the debts of a failed bank. Each bank was required to pay annually to the Treasurer of the State a sum equal to one-half of one per cent. of its capital stock until the payments should amount to three per cent. The first act, approved April 2, 1829, provided for the distribution of the assets of a failed bank in the usual way and that, after all the assets had been turned into money and the final distribution made, a court of chancery should enter an order showing the amount necessary to discharge the remaining debts and should authorize the Comptroller to pay the amount from the bank fund. This law was modified by the Act of May 8, 1837, to enable the State authorities to take such measures as might be necessary for the immediate payment of the notes of any insolvent bank whose liabilities in excess of assets should not exceed two-thirds of the bank fund. It was not until 1842, after the failure of nine of the banks incorporated under the safety fund system, that an act was passed making the circulating notes only a charge against the safety fund and leaving the other liabilities of the failed bank to be paid from the assets.

The panic of 1837 put the safety fund to its first test and compelled the State Comptroller to make heavy payments in the redemption of circulating notes. Three important banks in Buffalo failed early in May, 1837, with a reported circulation of $413,961. The Comptroller announced that their bills would be received in payment of canal tolls and other debts to the State and they were maintained substantially at par. The charters of two banks were repealed by the Legislature in 1837 and their notes redeemed by the State, but one of these charters was renewed and the payments from the safety fund were reimbursed. The safety fund was practically intact in 1840 and stood at $870,615.

The next three years witnessed eleven failures, which practically wiped out the safety fund and compelled calls upon the solvent banks to make it good. The redemption of notes was suspended after the first four failures, because the fund was deemed no more than sufficient to cover their liabilities, but the Act of 1842 permitted the banks to anticipate their annual contributions by as much as six years in some cases and to pay into the fund at par the notes of the failed banks. The banks very generally took advantage of this provision and made a good profit on notes of the failed banks which had fallen into their hands at a considerable discount. Their advance payments did not involve a loss of interest, as the original law required the investment of the bank fund and the payment of interest to the banks, and the Act of 1842 granted seven per cent. interest on the advance payments. Redemptions of notes up to September 30, 1850, were $1,614,577 and payments to other creditors up to 1851 were $1,088,109.

The failure of the Lewis County Bank in November, 1854, with deposits of only $1,998 and outstanding notes for $148,545, found the safety fund no longer adequate to redeem circulation. Future contributions up to 1860 were pledged for the redemption of the public stocks which had been issued to obtain ready money to provide for previous failures. The notes of the Lewis County Bank were finally redeemed twelve years later and the notes of the three banks which failed in 1857 were provided for out of their assets. The total contributions to the safety fund from its creation to the abolition of the system were $3,104,999.

The safety fund system broke down primarily because the fund was made to cover all liabilities instead of simply the liability for note issues. The fact that another system was adopted for banks organized after 1838 also operated to the injury of the safety fund system, because no new banks became contributors and the failure and withdrawal of some of the old ones gradually reduced the number over whose resources the liability was distributed. Another evil by no means inherent in the safety fund system, but which

increased the demand upon it, was the issue of notes by several of the safety fund banks in excess of the maximum allowed by law. This defect was remedied in 1843 by an act providing for the issue of notes registered and countersigned by the Comptroller and the surrender of the plates with which the banks were then printing their notes. A mistake was made also in basing the contributions of the banks to the safety fund upon their capital rather than upon their outstanding circulation. But the arrest of the expansion of the system, the over-issue of notes in violation of law, and the distribution of the assessment in proportion to capital, would not have prevented the success of the safety fund system if the fund had been maintained exclusively for the redemption of circulating notes. The fund would have amply secured the notes of the New York banks and ensured their prompt redemption at par, even without the reduplicated security afforded by the constitution of 1846, which made the notes a first lien on the assets and made stockholders liable, to the amount of their stock, for the debts of a failed bank contracted after January 1, 1850. A careful estimate shows that the annual assessment required on the average from 1829 to 1865 to keep the fund good and redeem every dollar of the circulation of suspended banks would have been less than one-fourth of one per cent. of the banking capital, or about three-eighths of one per cent. on the average outstanding circulation.[1]

Bank charters continued to be granted in New York by special acts and to be subject to political favor after the adoption of the safety fund plan and up to 1838. A campaign for free banking,—in the sense of equal right to all persons complying with fixed conditions,—was waged by

[1] Root, *New York Bank Currency*, "Sound Currency," Vol. II., No. 5, p. 15. Millard Fillmore, who was Comptroller of the State in 1848, showed that up to that time, covering the period of the most numerous failures, the contributions to the safety fund had been $1,876,063 and the outstanding circulation of the failed banks $1,548,558, leaving a surplus of $327,505, if the fund had been used simply to guarantee circulation.

the Loco-Foco Democrats for several years and bore fruit in the Free Banking Act of April 18, 1838. Individuals or associations were authorized by this act to engage in the issue of notes, which were to be delivered to them by the State Comptroller, upon depositing with him the stocks of the United States, of the State of New York, or of any other State approved by the Comptroller, made equal to a five per cent. New York stock. Provision was also made for issuing notes on bonds and mortgages on improved, productive and unincumbered real estate worth double the amount secured by the mortgage, and the notes were to show whether they were secured by stocks or by mortgages. The mortgage feature of the law opened the door to a paper money Saturnalia as dangerous as the issues of Law's Bank, the *assignats* of the National Assembly, or the Land Bank of Norway; but fortunately the conditions attached to the issue of notes for mortgages were somewhat severe and such issues never attained any considerable proportion of the aggregate circulation of the free banks. The provision for mortgages as a basis for circulation was repealed in 1863 and securities for note issues were restricted solely to stocks of the State of New York and of the United States.

Individuals as well as associations were prompt to take advantages of the free banking law and the amount of capital subscribed by January 1, 1839, was $10,838,175. The actual circulation under the law at that time was only $396,300, but the circulation had increased by December 1, 1839, to about $6,000,000, issued by seventy-six persons or associations, with fifty-seven additional applications pending. Eight of these banks went out of business before January 1, 1841, and eighteen more followed in the course of the next year. The notes were redeemed at an average discount of twenty per cent. for those secured by stocks and twenty-five per cent. for those secured by stock and real estate. The results of the sales of securities up to the close of 1850 showed aggregate receipts of $1,142,758 upon stocks which had been accepted as security for circulation to the amount of $1,468,245. This afforded a dividend

of about 77 per cent. upon the circulation thus redeemed. The New York stocks sold on the average for 92.86 per cent. ; Michigan stocks came next at 72.95 per cent. ; Indiana bringing up the rear at 49.08 per cent.

The fact that individuals could issue notes under the free banking law upon the deposit of securities led to many visionary efforts to exploit credit and resulted in 1844 in legislation requiring an individual banker to deposit securities to the amount of not less than $50,000 and to transact business in the place in which he resided. A market was created in New York for a time for securities which did not find a ready sale elsewhere and quotations for such securities were strengthened, but this market was destroyed by the Act of 1840, limiting the securities thereafter accepted to those of New York. Such changes gradually strengthened the system until there was little to be desired on the single ground of security. The failures during the first twelve years of the free banking system showed losses of $326,000, or only $27,200 per year on an average circulation of about $6,000,000. This was less than one-half of one per cent. per year and the losses in the remaining fifteen years of the operation of the system averaged only $4800 per year on a circulation of about $22,000,000, or less than one-fortieth of one per cent. The circulation issued under the free banking law was not a strong reliance, however, in times of pressure and was threatened at such times, when strength was most needed, by the decline in securities. It had little elasticity and did not meet the demands of the business community in this respect nearly so well as the circulation of the safety fund banks. Defects of detail were gradually eliminated, however, and the system was successful enough to attract attention in Canada in 1850 and to become the model of the national banking system of the United States in 1863.

The banking laws of New York were followed also in many Western States, but not always closely enough to assure the later systems the solidity of the original. The State Bank of Ohio, created in 1845, was one of the best of these institutions and its note issues were protected by a

combination of the safety fund and security principles. The bank was not, as its name might imply, an institution of State, but was owned entirely by individuals and acted as a sort of board of control for the branch banks. Each branch was required to deposit with the board of control ten per cent. of the amount of its circulating notes, either in specie or in the bonds of the State or the United States, as a safety fund for the protection of the entire note issues of the bank. Each branch was liable for the circulation, but not for the other liabilities, of the other branches. The reimbursement of the safety fund for notes redeemed was constituted the first lien on the assets of a failed branch. The State Bank of Ohio was eminently successful and was managed in much the same way as the State Bank of Indiana. The aggregate capital of the thirty-six branches in 1863 was $4,054,700; circulation, $7,246,513; loans and discounts, $8,653,459; deposits, $5,631,629; and specie, $2,216,982.

The State of Michigan enacted a safety-fund law in 1836, but it was forgotten and ignored in the phrensy of paper inflation which swept over the State during the next few years. The first session of the State legislature in 1837 passed a general banking law, which was followed up after the panic in the same year by an act permitting new banks to begin business in a condition of suspension of specie payments. Thirty per cent. of the capital was required to be paid in specie, but this provision was evaded by borrowing specie for a few days when the bank commissioners made their tours of inspection. Any twelve free-holders could form a bank if they were able to show a capital of $50,000, including thirty per cent. in specie and the remainder in bonds and mortgages approved by the Auditor General of the State.[1] The restraints of the law were so recklessly violated that the State was soon flooded with $1,000,000 in worthless bills. Banks were created after specie resumption in the most inaccessible places, that their notes might not be presented for redemption; and Eastern speculators took out

[1] Felch, Senate Ex. Doc. 38, 52d Cong., 2d Sess., 76.

Michigan charters and issued the bills in other States where the standing of the banks could not be known. "They were at a great discount," says Judge Cooley, "as compared with Eastern bills; the issues of one bank were at a discount as compared with those of another; merchants kept couriers by whom they hurried off to the banks of issue the bills they were compelled to take, that they might if possible exchange them for something in which they had more confidence. No 'circulating medium' ever before circulated so rapidly."[1] Fraudulent over-issues were frequent and in many cases were not even recorded. Misery and bankruptcy spread over the State, with their natural sequence of stay laws and laws fixing the value at which the property of debtors should be taken. The free banks were nearly all in the hands of receivers when, in 1844, the Supreme Court of the State decided that even the receiverships had no legal existence, for the general banking act had been passed in violation of the constitutional provision regarding corporations, which implied the necessity of a separate charter in each case.

Banking laws basing the issue of notes upon securities were adopted by Illinois in 1851, Indiana in 1852, Wisconsin in 1853, and other States soon after. The restrictions which experience in New York showed to be necessary to protect note-holders received little attention in the West and the rapid depreciation of the "red dog" and "wildcat" currency cast a suspicion upon State bank issues which has survived to this day. Fifty-one of the ninety-four free banks of Indiana suspended before the panic of 1857 and most of those left tumbled like a house of cards in all the States when the pressure came. A fictitious market was created for securities, which brought prices that could not have been otherwise obtained, and the stimulus was thus given for the creation of public debt by the issue of securities, the issue of bank-notes on the securities, the purchase of more securities to be used as the pledge of new bank-notes,

[1] *Michigan*, 272.

and so on in an endless chain of debt creation and the inflation of paper wealth. It was usually found when a bank failed that the securities could not be marketed for their face value and in many cases that there were no other available assets. The Bank Comptroller of Wisconsin reported as late as 1863 a list of fifteen failed banks whose notes he was redeeming at rates ranging from sixty cents to ninety-five and a half cents on the dollar.[1] The basis of redemption, however, was not coin, but United States Treasury notes, themselves depreciated about thirty per cent., so that it was necessary to multiply the one depreciation into the other to obtain the scanty proceeds in coin of Wisconsin notes based upon "securities." Free banking laws were passed in eastern States, but the system made little headway in those States against the established credit of the chartered banks.

One of the most dismal chapters in American banking history is that which records the creation and collapse of banks owned and managed by the States. The Federal Constitution sought to close the door against issues of the legal tender paper money, which had worked such havoc with prices and credit during the Revolutionary era, by the decree that no State should "emit bills of credit." The Supreme Court sustained the force of this prohibition in the case of Craig *vs.* the State of Missouri (4 Peters, 410), and decided that the certificates issued by the State and made receivable for salaries and taxes, even though not full legal tender, fell under the ban of the constitutional restriction. A different spirit ruled the court when the case of Brisco *vs.* the Bank of the Commonwealth of Kentucky was decided in 1837. Chief-Justice Marshall had just died, but Justice Story, who dissented from the majority decision, insisted that his dead associate had agreed with him, that the pending case could not be distinguished in principle from that of Craig *vs.* Missouri. The majority found a distinction in the fact that the bills in question were issued by a bank under

[1] *Report of the Secretary of the Treasury on Condition of the Banks at the Commencement of 1863*, 204.

the direction of a president and twelve directors. They held, notwithstanding the fact that the bank was exclusively the property of the State, that the notes were not "bills of credit" within their definition, which included only "paper issued by the authority of a State on the faith of the State, and designed to circulate as money." [1]

The mania for banks of State was already well on its course before this decision was made. The Commonwealth of Kentucky had been part owner in the Bank of Kentucky, incorporated in 1806, and owned $586,400 of the capital stock of $2,726,100 when the charter was repealed in 1822. The Bank of Kentucky was hampered throughout its career by State interference, but was paying specie and its stock was at par when the State decided to set up a rival under its own exclusive ownership and management. The new-comer was the Bank of the Commonwealth of Kentucky, chartered for twenty years by the Act of November 29, 1820, with a capital of $2,000,000, which was increased December 22, 1820, to $3,000,000. The State availed itself of the power to appoint additional directors in the old bank to pack the board with pliant tools, who soon effected its ruin for the benefit of the new institution. The Bank of the Commonwealth, however, was a pitiable failure. Its notes had fallen on March 22, 1822, to sixty-two and a half cents on the dollar and they continued to fall until the entire State was embroiled in a legal controversy which almost ended in

[1] Brisco *vs.* Bank of Kentucky is reported in 11 Peters, 257. Prof. Sumner declares that by this decision "wildcat banking was granted standing ground under the Constitution" and that "the decisions of the Supreme Court on the constitutionality of the Legal Tender Act must have borne an entirely different color, if Marshall's opinion had prevailed in Brisco's case."—*Andrew Jackson*, 363. Judge Story went so far, in his Commentaries on the Constitution, as to intimate that if the question were a new one, it would be doubtful if the States had power under the Constitution to incorporate banks of issue; but it is obvious that the permission to issue notes, circulating, like other commercial paper, upon private credit, is very different from the issue under public authority of legal tender money.—Kent, *Commentaries*, I., 408.

revolution. The hard times of 1818 had resulted in the charter of forty-six banks with a total capital of $8,720,000, but the demand for specie by the United States Bank drove them to the wall and the State was left without solvent banks. A more permanent legacy of the hard times was a replevin law, passed in 1820, which gave debtors two years within which to redeem their goods unless payment was accepted by creditors in notes of the Bank of the Commonwealth.

"The relief laws," of which the replevin law was one, became the political issue of the hour. Judge Clarke, of the Clarke County District Court, declared one of the provisions of the replevin law unconstitutional, as impairing the obligation of existing contracts. The Appellate Court sustained Judge Clarke, in spite of an effort to remove him by an extra session of the legislature, but the relief party swept the State in the elections of 1824, repealed all laws concerning the Appellate Court and created a new Court of Appeals. The Justices of the old court took the ground that their offices were created by the Constitution and could be abolished only by constitutional amendment. Their records were taken from them and kept under military guard, but the old court continued to meet and decide cases alongside of the new. The next electoral campaign found the people in more sober mood. The "Old Court party" elected sixty members of the legislature against thirty-five of the "New Court party," and at the next election a majority of the Senate was secured and a bill was passed in December, 1825, over the veto of the governor, by which all the laws constituting the new court were repealed.[1] An act was passed in 1830 by which the Bank of the Commonwealth ceased to loan money, apparently for the reason that no one cared to borrow the sort of money which it issued. The Commonwealth of Kentucky had a share in some banks afterwards established, but it did not again attempt the folly of State management.

The State of Alabama had an experience with a bank of State which, according to Governor Jones, has subjected the

[1] Shaler, 178–84.

people to a permanent tax of nearly $1000 per day for taxation to meet the cost of the experiment.[1] An act was passed December 21, 1820, to incorporate the Bank of the State of Alabama, but it provided for a capital of $2,000,000, of which three-fifths was to be obtained by private subscriptions. Subscriptions were slow in coming and the difficulty was met by an Act of 1823, removing any limit upon the capital and providing that the State should furnish the whole. Various public funds were set apart to constitute a part of the capital, among them the proceeds from the sale of lands donated by Congress for schools, amounting to about $1,300,000, and the funds of the University of Alabama to the amount of about $500,000. These grants were only a beginning, and between 1832 and 1837 the State issued bonds to the amount of $13,800,000 for the increase of the capital of the bank and to enable it to resume specie payments.

The purpose of the founders of the bank was to distribute the bank money as evenly as possible among the people of the State and the original act stipulated that the loans be apportioned among the several counties in proportion to their representation in the General Assembly. Loans to a single individual or corporation were not to exceed $2,000, but this rule was not closely adhered to in loans to the president and directors. The president and twelve directors were chosen by the General Assembly and the choice of directors for the branch banks increased the number annually chosen to between sixty and seventy. Candidates for the assembly were compelled to promise their supporters liberal loans in case of election and to exact pledges from candidates for the directorships that the loans should be granted. One of the hotel keepers of Tuscaloosa succeeded in securing an election as director in 1832 and his hotel swarmed with members of the legislature and persons desiring to borrow money, who hoped to secure his support in the negotiation of loans. Four other hotel keepers

[1] Century, *Cheap Money Experiments*, 88.

realized that they were conducting business under a heavy handicap and secured their own election as directors in 1834. A director could not afford to refuse a discount requested by a member of the legislature and the discounts of the bank increased from $448,859 in 1826 to $20,642,473 in November, 1837. The circulation had swelled in the meantime from $273,507 to $6,676,050.

Those were "flush times" in Alabama and so complete was the intoxication of the people with the paper money craze that the General Assembly on January 9, 1836, passed an act abolishing direct taxation in the State and setting aside $100,000 of the bank money to defray the expenses of the State government. The crisis of 1837 led to an investigation of the discounts and it was found that over $6,000,000 were worthless. Confidence in the paper money, "supported by the faith and credit and wealth of the State," to use the favorite phrase of the champions of government paper money, suddenly collapsed and with it the whole structure of business and credit in Alabama. The General Assembly was hastily summoned in special session and authorized a loan to the people of $5,000,000 in bank money, which was increased by $2,500,000 in December; but the fever had run its course, the charters of the branch banks were repealed in 1842, and the charter of the State Bank was not renewed when it expired in 1845. The assets of the bank netted about $10,000,000 towards reducing the bonded debt to the State, but $4,000,000 was a dead loss, in addition to the public funds originally set aside for the use of the bank. The effect of their experiment with a bank of State upon the people of Alabama was indicated by the provision of the constitution of 1867, that "The State shall not be a stock-holder in any bank, nor shall the credit of the State ever be given or loaned to any banking company or association or corporation."

Mississippi had a similar experience. Two early experiments in State ownership with bad results did not deter the people from the establishment of the Union Bank of Mississippi in 1838 with a capital of $15,000,000. This capital

was to be raised by means of loans to be obtained from the directors and the loans were to be negotiated through bonds of the State for which the credit of the State was pledged. The first block of $5,000,000 in bonds was sold at par through Nicholas Biddle, president of the Bank of the United States. The bank management exercised the worst possible judgment in loans and advances and the bank ran its course within four years. Post notes were issued, on account of the suspension of specie payments, and the issues of the bank and its six branches had increased in April, 1840, to $3,337,665. The other banks vied with the Union Bank in the issue of currency and at the close of 1839 the twenty-six banks in the State professed to have a paid up capital of $30,379,403, loans and discounts of $48,333,728 and a circulation of $15,171,639. As the free white population of the State at that time was only 170,000, the alleged paid-up capital equalled $180 per capita, loans and discounts $285, and circulation nearly $90. The State repudiated her obligations on the bonds issued and never attempted to pay them. The results upon the community are thus set forth by Mr. Henry V. Poor :[1]

> The $48,000,000 of loans were never paid ; the $23,000,000 of notes and deposits never redeemed. The whole system fell, a huge and shapeless wreck, leaving the people of the State very much as they came into the world. Their condition at the time beggars description. Society was broken up from its very foundations. Everybody was in debt, without any possible means of payment. Lands became worthless, for the reason that no one had any money to pay for them. The only personal property left was slaves, to save which, such numbers of people fled with them from the State that the common return upon legal processes against debtors was in the very abbreviated form of "G. T. T.," *gone to Texas*,—a State which in this way received a mighty accession to her population.

Several other Southern and Western States went through similar experiences. The Union Bank of Florida, chartered by the territorial government on February 12, 1833, with a capital of $1,000,000, was assisted by the issue of State bonds,

[1] *Money and Its Laws*, 540.

of which more than half were sold in Europe. The proceeds were loaned on stock and mortgages, mainly to stockholders, and the circulation was run up in 1839 to $551,747. A committee of the legislature made an investigation in 1840 and their report was very unfavorable to the bank. The State government, after the admission of Florida to the Union, refused to recognize the privileges of the Union Bank and the Secretary of State reported in 1858 that its circulating notes were worth not more than twenty cents on the dollar. A real estate bank was one of the features of the Arkansas system, towards which the subscribers to the stock were required to pay nothing in, but merely to secure their subscriptions by mortgaging their real estate. The working capital of the institution was obtained by the issue of State bonds, of which $2,000,000 were authorized. "A prudent expansion of the currency of the State" was one of the avowed objects of the bank and loans were made within a year after opening on December 12, 1838, amounting to $1,585,190. The circulation of the bank at this time was only $156,910, but specie payments were suspended and circulation was increased in May, 1840, to $759,000. The notes suffered a discount of forty to forty-five per cent. and it was soon discovered that the collection of loans on maturity was a far different matter from making them. The directors made an assignment on April 2, 1842, and the notes of the bank afterward passed for about twenty-five per cent. of their face value in specie. A like experiment had been going on in the meantime with the Bank of the State of Arkansas and the total amount of unredeemed bonds issued by the State on behalf of both banks, including interest, up to October 1, 1868, was $4,993,503.

Illinois tried several experiments at issuing money upon "the credit of the State," and the circulation of the State Bank of Illinois, incorporated in 1821, did not exceed $300,000. Even this moderate limit did not keep the notes from falling within three years to twenty-five cents on the dollar, and in 1825 an act was passed requiring the cashier of the bank to collect all the signed and unsigned notes in his pos-

session and burn them in the public square of Vandalia, in the presence of the governor and the judges of the Supreme Court. The next State Bank was incorporated in 1835 and $2,000,000 of the capital subscribed by the State was paid by the issue of bonds, which were taken by the bank at par. Assistance was also given to the Bank of Illinois at Shawneetown, but both banks collapsed in 1842 and the State was saved from much actual loss by the surrender by the banks of the State stock, which was burned in the Capital Square at Springfield in the presence of the legislature. The Constitution of 1848 provided that no State bank should thereafter be created nor should the State own any banking stock. Tennessee authorized a State Bank in 1820, which issued $1,000,000 in inconvertible notes in loans of $500 each upon real estate mortgages worth double the amount.[1] The notes quickly dropped below par and the bank closed in 1832.

Louisiana incorporated the Union Bank of Louisiana in 1832 upon similar principles with those of the Union Bank of Florida and issued $7,000,000 in State bonds to provide the capital. Bonds to the amount of $10,004,000 were issued to two other institutions, but all three failed in 1842 and the State enacted a sound banking law, under which she became in 1860 the fourth State in the Union in banking capital and the second in specie holdings.[2] The essential feature of the law was the requirement that the liabilities be covered one-third by specie and the remaining two-thirds by commercial paper having not more than ninety days to run. Louisiana prohibited State subscriptions for bank stock in her constitution of 1852. Georgia, Vermont, Missouri, Delaware and the Carolinas all tried State ownership and management of banks, but the first two early abandoned the experiment. The others ceased to be banks of issue with the establishment of the national banking system. The Farmers' Bank of Delaware was never much under political influences and is still conducted as a bank of discount and deposit. The Bank of Missouri had a coin reserve of one-third of its cir-

[1] Knox, *Rhodes's Journal of Banking*, Oct., 1892.

[2] White, *Sound Currency*, Vol. II., No. 1, p. 5.

culation and its connection with the State ended in 1866 by the sale of the State stock.

The State Bank of Indiana stands out, in the language of Mr. Horace White, a "notable tribute to sound banking principles from the weltering mass of bank failures of the period covered." The first bank of State was created originally as a private institution and adopted by the constitution of the State upon her admission in 1816 as a public bank. The experiment was a failure and it was not until 1834 that the State Bank of Indiana was incorporated, with ten branches. The parent bank, with a president and five directors elected by the legislature, acted as a sort of board of control over the branches, each of which was organized with a capital of $160,000 and chose one director as a part of the board of control. The two essential differences between the Bank of Indiana and the other banks of State were the payment of the capital in actual cash and the issue of notes upon liquid assets. The State, which took half the capital of each branch, paid its proportion in silver and advanced five-eighths of the private capital by the sale of five per cent. bonds in London, taking mortgage security for the final payment by the shareholders and crediting them with the dividends paid by the bank. The remaining three-eighths of the private capital was paid in cash by the shareholders, and each shareholder was made liable for an amount equal to his stock and the branches were jointly liable for each other's debts. The bank had a circulation in 1839 of $2,951,594.

The State Bank maintained a high credit, but was unable to obtain the renewal of its charter upon its expiration in 1857 because of a provision in the new constitution of 1851 that "the State shall not be a stock-holder in any bank after the expiration of the present bank charter." The State realized profits of $3,500,000 on the $1,000,000 invested in the institution, and its management had done so much for the development of the State that special privileges were given to a new State Bank of Indiana which was chartered March 3, 1855. The act of incorporation was quietly carried

through by a syndicate of politicians, who became large subscribers to the stock of the various branches. They opened negotiations with the managers of the old bank for the sale of the franchises and the latter made the purchase upon the condition that Hugh McCulloch, who had been for twenty years manager of the old Fort Wayne branch, should be made the president. The bank weathered the crisis of 1857 without suspending specie payments and rapidly retired its circulation when gold went to a premium in 1862. The bank was required by the conditions of its charter to pay its notes in coin, but a decision was obtained from the Supreme Court of the State that the United States legal tender notes were lawful money and could be lawfully used for the redemption of the notes. The circulation was reissued upon this basis, but upon the imposition of the ten per cent. tax on the circulation of State banks the State Bank of Indiana wound up its affairs with ample assets and unimpaired credit.[1]

The suspension of specie payments at the outbreak of the Civil War drove gold and silver from circulation and required an expansion of bank-note issues to maintain the volume of the currency. The Suffolk system continued in operation at Boston, but the notes failed to flow in as rapidly as before for redemption. The fact was noted and commented upon by the reports of the bank commissioners of Maine, New Hampshire and Massachusetts in their annual reports at the close of 1862 and among the reasons assigned was the fact that "in the present unsettled state of public affairs, the people have more confidence in the bills of the local banks than in any other paper currency."[2] Other reasons suggested were the large sums carried by soldiers to the seat of war and other sums left to be expended by their families, and the large amount of Eastern bills sent to the West by

[1] McCulloch, Ch. xi.–xii.

[2] Report of the Bank Commissioners of Maine, December 8, 1862, in *Annual Report of the Secretary of the Treasury on the Condition of the Banks of the United States at the Commencement of the Year 1863*, p. 3.

New York banks, to fill the gap created by the winding up of local institutions. The bank commissioners of Massachusetts maintained that when specie payments are suspended, "and bills are no longer redeemable in gold, a great motive for sending them home is withdrawn, since, if in good credit, they are as valuable as anything which can be got in exchange for them. Men hold them and hoard them, therefore, precisely as they would do with specie, and the volume of the currency becomes greater precisely as its current grows more sluggish."

It was very generally feared that the banks would sell their gold at a profit as it attained a high premium over legal tender paper, but the New England banks generally held on to their specie as a provision for the protection of their creditors and as security for future resumption. The commissioner of Maine reported, regarding the sale of specie for a premium, that "No instance has come to our knowledge where any bank has done anything of this kind; and certainly it cannot have been practised to any great extent, for the comparative tables show that, notwithstanding the suspension act, the specie in our banks has decreased only some $40,000." The New Hampshire commissioners reported that "the banks have not only kept their faith with the public, in retaining their specie in the vaults, but have actually increased the aggregate amount of specie, $38,827.52, or more than twelve per cent." The Massachusetts commissioners undertook to discourage sales of specie and declared that they "regard the sale of gold by the banks as altogether illegal, so long as they refuse to pay specie on their obligations."

One of the disadvantages of issuing bank-note circulation on securities was disclosed at the outbreak of the war in the sudden fall in value of Southern State bonds pledged by Northern banks to secure their circulation. This shrinkage in the value of the security for the notes was especially felt in Wisconsin. The case of the Koshkonong Bank, whose stock amounted at par to $48,000, of which all but $3,000 was issued by Southern States, was one of the worst, but

was typical of many others. The net proceeds of the bonds, when sold in the New York market, were only $21,769 and afforded the billholders only fifty-four and three-fourths per cent. on the dollar against an apparently well secured circulation of $39,779. The Bank Comptroller of Wisconsin was compelled to call upon nearly all the banks to make good the depreciation of stocks and their position became so precarious that a joint resolution was passed by the legislature on February 15, 1861, suspending further calls for additional securities. The Comptroller declared that "a general failure, involving three-fourths of all the banks, was imminent unless relief in some shape was granted ; and there is scarcely any occasion for doubt but at least eighty out of the one hundred and nine then existing banks would have failed."

The resolution of February was rescinded early in April and another call was made upon the banks to bring up the value of their stocks. Thirteen banks failed to respond and resisted the action of the Comptroller in the courts. The stronger banks gradually replaced Southern securities by those of Northern States and continued business upon this basis until the establishment of the national banking system. A shrewd stock jobbing scheme was put in operation by some of the bankers in the meantime by buying up depreciated currency at a great discount and offering it to the Comptroller for redemption in the better class of bonds, which could then be sold at a handsome margin over the cost of the currency. The Comptroller refused to permit the withdrawal of bonds except in such a way as to leave the better bonds in the custody of the State as security for the remaining circulation, but he modified this policy when he found speculators holding on to the notes, in anticipation of their final redemption from the proceeds of the stock, and surrendered good and bad stocks in fixed proportions.[1]

The New England banks felt the pressure of the repudia-

[1] Report of G. Van Steenwyck, Bank Comptroller of Wisconsin, Madison, October 1, 1861. House Ex. Doc. 25, 37th Cong., 3d Sess., 190–94.

tion of Southern obligations, but they had been preparing for it. Deposits fell in Boston from $20,811,889 on October 8, 1860, to $17,176,778 on December 10th, and specie reserves fell on December 17th to $3,491,348,—far below the limit required by law. The whole amount of Southern indebtedness to the North was estimated by intelligent merchants in New York and Boston at $200,000,000, and a large part of it was lost by the breaking out of war.[1] The Boston banks, however, succeeded in restoring their specie reserves by March, 1861, to $5,601,871, and the manner in which the banks of the State met their losses is thus described by the bank commissioners:

> The system pursued by them for many years, of making an annual reservation of a portion of their yearly earnings, had in some measure protected them against unusual amounts of dishonored and worthless paper. By the bank returns on the last Saturday of October 1860, the net profits then on hand amounted to $6,360,539.11, or $9\frac{9}{16}$ per cent. of the aggregate banking capital of the Commonwealth. And we do not hesitate to express the opinion, based upon the examinations we have made during the past year, and from information specially obtained from other banks, principally in Boston, that, notwithstanding the losses which some banks must inevitably sustain, the whole amount of final loss growing out of our difficulties with the South will be more than covered by the general surplus, thus leaving the aggregate bank capital free and unimpaired.[2]

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[1] Some estimated it at $200,000,000 to New York alone.—Rhodes, III, 560. The honorable conduct of the New Orleans banks is pleasantly referred to by Secretary Hugh McCulloch. The branches of the Bank of Indiana in the southern part of the State, he says, "had large dealings with men who were engaged in the Southern (Mississippi) trade, and when measures were being instituted for the secession of Louisiana from the Union, and, indeed, after the ordinance of secession had been adopted, these branches had large cash balances and large amounts of commercial paper in the New Orleans banks. Against the remonstrances of the secession leaders, and in disregard of threatened violence, these cash balances and the proceeds of the commercial paper as it matured were remitted for according to directions,—not a dollar was withheld."—*Men and Measures of Half a Century*, 139.

[2] House Ex. Doc. 25, 37th Cong., 3d Sess., 50.

The growth of the capital and business of the State banks of circulation is shown in the following table:

YEAR.	NO. OF BANKS.	CAPITAL STOCK.	LOANS AND DISCOUNTS.	DEPOSITS.
1834	506	$200,005,944	$324,119,499	$ 75,666,986
1835	704	231,250,337	365,163,834	83,081,365
1836	713	251,875,292	457,506,080	115,104,440
1837	788	290,772,091	525,115,702	127,397,185
1838	829	317,636,778	485,631,687	84,691,184
1839	840	327,132,512	492,278,015	90,240,146
1840	901	358,442,692	462,896,523	75,696,857
1841	784	313,608,959	386,487,662	64,890,101
1842	692	260,171,797	323,957,569	62,408,870
1843	691	228,861,948	254,544,937	56,168,628
1844	696	210,872,056	264,905,814	84,550,785
1845	707	206,045,969	288,617,131	88,020,646
1846	707	196,894,309	312,114,404	96,913,070
1847	715	203,070,622	310,282,945	91,792,533
1848	751	204,838,175	344,476,582	103,226,177
1849	782	207,309,361	332,323,195	91,178,623
1850	824	217,317,211	364,204,078	109,586,595
1851	879	227,807,553	413,756,799	128,957,712
1853	750	207,908,519	408,943,758	145,553,876
1854	1,208	301,376,071	557,397,779	188,188,744
1855	1,307	332,177,288	576,144,758	190,400,342
1856	1,398	343,874,272	634,183,280	212,705,662
1857	1,416	370,834,686	684,456,887	230,351,352
1858	1,422	394,622,799	583,165,242	185,932,049
1859	1,476	401,976,242	657,183,799	259,568,278
1860	1,562	421,880,095	691,945,580	253,802,129
1861	1,601	429,592,713	696,778,421	257,229,562
1862	1,492	418,139,741	646,677,780	296,322,408
1863	1,466	405,045,829	648,601,863	393,686,226

Tradition has handed down unhappy memories of the State banks, which have been distorted by the lapse of time into conceptions very different from the facts. The several systems, taken in the aggregate for the entire country, had the great practical defect of lack of uniformity. This defect was great enough to obscure the essential merits of many of the State systems and to make any system which was national in its scope and uniform in its character attractive to the business community of the whole country. Whatever the merits or defects of the State systems, the currency in circulation was judged by the worst of the systems, for by the operation of Gresham's law that currency tended to drive

out of circulation all kinds which were superior; and even where this was prevented by laws or local conditions, the bad currency was a constant source of irritation from the very necessity of discriminating, in receiving money payments, between the bad and the good. One of the requirements of the modern business world is undoubtedly a uniformity of currency which shall obviate the necessity for discrimination and make every dollar of equal exchange value with every other. This condition was not met by the aggregate of State currencies and the fact that it was fully met by the New England currency at its best may easily have been obscured, in the minds of New Englanders, by the multiplicity of good and bad currencies from other sections which caused perpetual inconvenience.

The national banking system of later years garnered up the lessons of many experiments with banking upon securities, adopted most of the good and discarded most of the bad features, and afforded the country two of the great benefits of a sound currency,—security and uniformity. The necessity of discrimination between currencies ceased when every dollar in circulation rested upon a common basis,—the credit of the national government. The necessity of paying high exchange rates, or surrendering the notes of distant banks at a heavy discount, ceased also when every note became as good in one part of the Union as in another. Coupled with these great benefits of the new system was the feature of Federal supervision and examination, which arrested the creation of fraudulent banks at the outset and subjected them annually or oftener to the power of visitation by the national authority. The three great benefits,—security, saving of exchange, and Federal supervision,—are almost inherent parts of a national system. The fact that they have been associated with a particular national system has led many to believe that there can be no other equally good, and that enmity to the present banking law is enmity to the principles of sound finance. But all these benefits can be obtained under national law with the added benefits, which the present system lacks, of a banking currency ample

for the demands of business, without the help of government paper money, and flexibly responsive to those demands.

The foundation of a national currency upon evidences of public debt is dangerous and unscientific and proved fatal to some of the State currencies before the Civil War. A comparison of the State systems shows a distinct line of cleavage which is far from favorable to the principles of the present national banking law. This line of cleavage separates the banks issuing currency against general assets, like those of New England, Indiana, and Louisiana, from those issuing circulation, on the other hand, against securities, like the banks of New York, Illinois, and Wisconsin, and those established under the parental care of the State, like the Bank of the Commonwealth of Kentucky, the Union Bank of Florida, the State Bank of Alabama, and the Bank of Mississippi. The experience of the New England and Indiana banks is the triumphant vindication of the principle of banking on general assets and issuing notes redeemable in coin on demand, which is supported by the critics of the present national system and the advocates of a banking currency. The banks issuing circulation on securities, with their pitiable failures and their wildcat banking, were the prototypes of the national system and afford a hint of what that system would become if note issues based upon State and municipal securities were substituted, as is sometimes proposed, for note issues based upon national bonds. It must be remembered, moreover, that perfect as the security seems for bank-notes under the national system, it is a security which has followed the ups and downs of government paper money. There was neither purpose nor pretence of maintaining the notes of national banks at parity with coin while the notes of the government itself and the bonds by which bank-notes were secured were depreciated. Bank-notes remained from 1864 to 1879 at par with government obligations because those obligations themselves were far below par in coin.

If the banks issuing circulation upon securities were the model for the national banks of to-day, the banks of State

which existed before the war were the models and the prototypes of the Federal treasury management under the *régime* of legal tender paper. Their issues were not bank-notes in the sense in which banking currency is opposed to a government paper currency, but they were simply the bills of credit of the State resting upon the credit of the State as completely as the paper roubles of the Bank of Russia. The fact that they were hardly ever maintained at par in coin, in spite of the great wealth and undoubted honesty and good faith of the people of the various commonwealths, is a practical demonstration of the folly of attempting to do a banking business upon general credit without quick assets. The lesson of the history of the State banking systems, reduced to its simplest terms, is the success of the systems based upon the banking principle and the failure of the systems based upon the deposit of securities, like the national banking system, or based simply upon the public credit, like the government currency system of the United States.

One of the essential errors of early banking in the United States was the undue expansion of credit upon slender resources. It is an error common in a new country and one from which the United States and Australia, in more recent years and under other systems of note issue, have not been exempt. The impression has been assiduously cultivated by the opponents of a banking currency that the early American banks issued a volume of circulating notes enormously in excess of the legitimate demands of business. This impression is absolutely unfounded and the proof is afforded by the figures. Some of the State banking currencies were over-issued in the sense that every dollar which is not kept at par with the metallic standard is improperly issued, but the aggregate banking currency of the country was at no time over-issued in the sense that an equal volume of good money was not capable of ready and healthy absorption by the legitimate demands of business. The circulation of all forms of money in the United States between 1880 and 1895 has ranged between $21.71 and $24.44 and has only

recently been regarded, with the slackening of business activity, as beyond the volume required by business needs. It is only necessary to compare such figures with those of the circulation prior to the Civil War to show how erroneous is the assertion that the currency was unduly inflated in volume during the years of State banking. The following table shows the circulation of both bank-notes and specie at various dates, including the years of largest circulation,—the difference between the bank-note circulation and the total money in circulation representing the specie:

YEAR.	ESTIMATED BANK-NOTES OUTSTANDING.	TOTAL NOTES AND MONEY IN CIRCULATION.	POPULATION.	CIRCULATION PER CAPITA.
1800	$ 10,500,000	$ 26,500,000	5,308,483	$4.99
1810	28,000,000	55,000,000	7,239,881	7.60
1820	44,800,000	67,100,000	9,633,822	6.96
1830	61,000,000	87,344,295	12,866,020	6.69
1835	103,692,495	145,799,637	14,786,000	9.86
1837	149,185,890	217,185,890	15,655,000	13.87
1840	106,968,572	186,305,488	17,069,453	10.91
1845	98,608,711	177,950,405	19,878,000	8.95
1850	131,366,526	278,761,982	23,191,876	12.02
1853	188,181,000	402,238,107	25,615,000	15.80
1854	204,689,207	425,551,240	26,433,000	16.10
1855	186,952,223	418,020,247	27,256,000	15.34
1856	195,747,950	425,846,625	28,083,000	15.16
1857	214,778,822	457,068,708	28,916,000	15.81
1858	155,208,344	408,810,028	29,753,000	13.78
1859	193,306,818	438,967,542	30,596,000	14.35

CHAPTER XV.

THE NATIONAL BANKING SYSTEM.

State of the National Finances at the Beginning of the War—The Suspension of Specie Payments and the Loan Policy of Secretary Chase—The First Plans for the National Banking System—Changes in the Circulation—The Necessity for a New System and the Plan of Secretary Carlisle—The Adoption of the Gold Standard in 1900, and Later Efforts to Secure Banking Reform.

THE national banking system of the United States had its origin in the management of the finances during the Civil War. The system was hardly in operation until the war was two-thirds over, but it offered a market for the public securities which contributed materially to raise their price in the depreciated paper with which the government discharged its obligations. The system afforded the country for some years a currency having the advantages of uniformity and security, and possessed in these respects a great advantage over the bank currency of the different States which had before been in use. The national banking system, however, great as were its services in absorbing the evidences of the public debt, always lacked the essential feature of a purely banking currency. The currency was without elasticity, in the sense of responsiveness to the demands of business, and the volume fluctuated only with the price of securities. The gradual reduction of the public debt has removed the basis for national bank-note circulation until it has become but a minor factor in the currency system of the country, and a strong demand has arisen for the separation of the note issues from public securities.

The United States at the outbreak of the Civil War were conducting their financial operations through the independent Treasury. The notes of the State banks formed a large part of the medium of exchange in private transactions, but only specie was accepted in payments to the government. The aid of the banks was not sought in handling funds, in making transfers, in placing loans, or in paying interest. This at least was the theory of the independent Treasury, although in fact the absence of proper depositaries led many public officers to deposit their funds temporarily in the banks at their own risk.[1] The circulation of the country outside of the Treasury on July 1, 1861, consisted of $246,400,000 in specie and $202,005,767 in the notes of State banks, making a total of $448,405,767, or $13.98 per capita.[2] The essential question for Mr. Chase, Lincoln's Secretary of the Treasury, was whether the operations of a great war could be carried on through these instrumentalities. The question was the occasion of much discussion at the time and has never been answered to the satisfaction of all sides. The answer of Mr. Chase was that the operations of the war could not be carried on upon a basis of specie and State bank paper.

The government was obliged almost at the outset to abandon the position that it was able to carry on its own finances without the help of the banks. Some small loans had been placed by public subscription during the administration of Buchanan, but it was perfectly obvious that great sums could not be obtained quickly except from the banks, which had the keeping of the transferable capital of the country. Secretary Chase held a conference in New York on August 9, 1861, with representative bankers of New York, Philadelphia, and Boston. They agreed to advance to the Treasury $150,000,000 in gold, to be secured by three-year notes bearing interest at 7.30 per cent., and to be reimbursed as the proceeds of the sale of bonds were covered into the Treasury. This union of the banks of New York, Boston, and Philadelphia in support of the public credit was one of the most

[1] Kinley, 60–61.

[2] Finance Report, 1894, p. cviii.

important events of the war and committed the conservative business element conclusively to the side of the Union and the policy of coercion of the seceded States. The banks of the three big Eastern cities had an aggregate capital of $120,000,000, a circulation of $16,964,749, deposits of $125,617,207, and coin reserves of $63,165,039, the latter being equal to forty-five per cent. of demand liabilities.[1] They had already made an agreement in November, 1860, when secession compelled them to contract their business and prepare for a period of stress, for issuing clearing house certificates and making the specie of all the banks available as a common fund.[2]

Congress passed an Act on August 5, 1861, relaxing the provisions of the sub-treasury law so far as to permit the Secretary of the Treasury to deposit any money obtained from loans to the credit of the United States Treasurer in such solvent specie-paying banks as he might select.[3] The banks accepted this law as authority for the use of the ordinary means of commercial exchange,—bank-notes, checks and drafts,—in the transactions of the government. They recommended to the Secretary, therefore, that he should take the proceeds of the advances made by the banks by drawing checks and drafts upon the banks, in favor of public creditors. They suggested that this would not only prove of great practical convenience, but would diminish the hoarding which would take place if the banks paid out their coin and reduced their reserves while uneasiness as to the future prevailed in the business community. Secretary Chase, to the surprise of nearly every financier, declared that the Act of August 5th had no such meaning or intent and that he should require payment of the advances in coin. The subject was warmly discussed between the Secretary and the bankers, but the Secretary's purpose was unshaken and the banks yielded rather than break off negotiations so important to the maintenance of the public credit.

[1] Poor, 557.

[2] Bolles, III,, 23.

[3] Acts of Thirty-seventh Congress, 1st Sess., Ch. 46, Section 6.

One of the acts of the special session of Congress in the summer of 1861 authorized loans in several forms, including non-interest bearing notes of denominations less than $50, payable on demand by the assistant treasurers at New York, Boston, and Philadelphia. These notes were not made legal tender and Secretary Chase, in recommending them, declared that "The greatest care will, however, be requisite to prevent the degradation of such issues into an irredeemable paper currency, than which no more certainly fatal expedient for impoverishing the masses and discrediting the government of any country can well be devised." Notwithstanding this brave language, the Treasury began to issue the new notes early in August. They were very reluctantly accepted as currency and the banks refused to receive them except as special deposits. The new notes threatened to bring infinite disorder into the currency system by the element of inflation which they involved. The banks filed a prompt protest against thus trifling with the circulating medium while they were straining their resources to withdraw capital from active industry and divert it to the uses of the government. The Secretary intimated that he would suspend the issue of such notes until other resources were exhausted, but that he did not regard it as proper to pledge himself openly not to exercise a power conferred by law.

This was before the advances by the banks had begun, and upon this assurance they began to pay coin into the sub-treasury at the rate of about $5,000,000 at intervals of six days. The attempt to secure popular subscriptions for the seven-thirty notes through the agents of the government resulted in subscriptions of only $24,678,866, and the banks themselves came forward and took the notes and agreed to negotiate their distribution among the people. So perfect was the public confidence in the associated banks and so rapid the circulation of the money that the specie in the banks had not been materially reduced after the payment of the second instalment. The gold paid by the banks into the sub-treasury was disbursed by public officers and through the channels of circulation found its way back into

the banks. There was no apparent reason why advances should not be made in this manner to meet all the demands of the war without impairing the solvency of the Eastern banks. Fears were expressed in some quarters that the coin would gradually be absorbed by the Western banks, some of which were on a rather shaky foundation and had issued notes secured by the bonds of the seceded States. This evil had not begun to operate, however, before Secretary Chase again began to put in circulation a mass of demand notes issued directly by the government.

The Secretary did not long respect his assurances to the banks. The promise was given in August and heavy issues of notes took place in November. They were not cordially received as a means of circulation and were largely presented to the sub-treasuries for redemption in coin. The Treasury had little coin except that drawn from the banks, and the coin reserves of the latter now began to decline without any signs of recuperation. The specie in the New York banks, which was $49,733,990 on August 17th and $42,318,610 on December 7th, fell to $29,357,712 on December 28th. A conference was held with Secretary Chase and he was assured that the Treasury notes could not be received by the banks at par with coin and that their steady infusion into the currency would send gold to a premium as well as create an inflation of the paper circulation which would drag down the value of bank-notes in the same manner as the Treasury notes. The Secretary stubbornly refused to change his policy and the banks voted to suspend specie payments on Monday, December 31st.[1] The government necessarily followed

[1] Prof. Sumner seems to ignore the effect of the government issues of the demand notes and declares that the banks suspended, "without any earnest attempts to avoid it, and certainly without any necessity." —*History of American Currency*, 194. Secretary Chase, on the contrary, did not appear to blame the banks, but declared that unexpected military delays had increased expenditures, and diminished confidence in public securities, and that "These conditions made a suspension of specie payments inevitable."—*Report on the Finances*, 1862, 7.

suit, for the independent Treasury afforded no adequate fund of coin for keeping afloat such a mass of paper as Mr. Chase proposed to put into circulation.

This suspension, less than six months after the first serious conflict at Bull Run, opened the way for the long experience of irredeemable paper currency which ended only with the resumption of specie payments on January 1, 1879. The legal tender notes, which followed quickly on the heels of the demand notes, changed the standard of value in the United States, drove gold across the ocean or into private hoards, deprived us of foreign help and sympathy,[1] advanced prices from one hundred to two hundred per cent., and added enormously to the profits of speculators and to the costs of the war to the people of the country. The price of gold advanced steadily from the suspension of specie payments until the summer of 1864, when it touched 285. The wholesale prices of nearly all articles climbed upward with the gold premium and retail prices in many cases advanced still more, increasing the paper cost of every contract for carrying on the war. The government was obliged to sell its securities for depreciated paper, and to apply the proceeds to settlements in the same inflated medium. A computation of the proceeds of $2,565,233,591 received from the sale of public obligations for paper currency during forty-five months ending September 30, 1865, put the gold value at $1,705,347,632, representing a loss to the government by its depressed credit of $860,000,000, or more than the entire bonded debt left in force at the beginning of the fiscal year 1889.[2]

There have always been those who have maintained that the suspension of specie payments was a necessary condition

[1] In the case of America there was a further evil ; being a new country, she ought in her times of financial want to borrow of old countries ; but the old countries were frightened by the probable issue of unlimited inconvertible paper, and they would not lend a shilling.— Bagehot, *The English Constitution*, Ch. i., Works, IV., 46.

[2] H. C. Adams, "American War Financiering," *Pol. Sc. Q'rly.*, September, 1886, I., 374.

of war. The managers of the associated banks of the East recognized no such necessity until Secretary Chase began to flood the country with government paper money for which he had no means of redemption. They pointed out that transactions to the amount of $20,000,000 were settled daily in New York, without coin or even notes and that the settlement of an additional one or two million dollars daily for the government could be easily effected by the same machinery. It was only necessary that the government should have in hand at any one time enough currency, even if it insisted upon coin, for the transactions of a few days, while the means of giving mobility to the capital and resources of the country constantly existed in the hands of the banks. When the Secretary showed himself immovable upon the subject of issuing irredeemable notes, the suggestion was made to him that, if this dangerous path must be trod, it could be done much more safely through the banks than directly through the Treasury. In the forcible language of Mr. George S. Coe, it was represented to Mr. Chase: [1]

> That if an irredeemable paper currency was the inevitable resort, it would be more expedient and economical for the government not to become involved in its dangers, but to impose the duty and responsibility of issuing the notes upon the banks, who would naturally be compelled to keep the day of redemption continually in view. Thus, as a suspension of coin payment was about to be declared, it was practicable to preserve from distribution and set aside the forty millions of coin then owned by the banks, together with one hundred and fifty or sixty millions of government bonds, which could be taken by them as a special security for two hundred millions of notes, which could then be immediately issued by the associated banks from their own plates, and be verified and made national by the stamp and signature of a government officer. And that such an issue, so supported by coin and bonds, at once simple and expeditious, would serve the temporary purpose required, with little if any deterioration below coin value; and that it would be then practicable for the banks to continue, without further agitation, their advances. But the Secretary declined to entertain this suggestion; preferring the system of national banks which he had already conceived.

[1] "Financial History of the War," *Bankers' Magazine*, Jan., 1876.

Secretary Chase made the fatal mistake at the outset of relying upon loans to supply the means of carrying on the war instead of appealing to the productive resources and the patriotism of the people. His recommendation, at the special session of Congress in the summer of 1861, was to raise $80,000,000 by taxation and $240,000,000 by loans. Of the amount raised by taxation $65,000,000 was required for the ordinary expenses of the peace establishment, $9,000,000 was to pay the interest on the new debt, and $5,000,000 was to go to the establishment of a sinking fund for its final payment. It is no afterthought to declare that this policy of timidity was not approved by the country. A meeting of bank delegates was held in Washington on January 11, 1862, which recommended a tax bill to raise $125,000,000 in addition to the usual duties on imports. A resolution was introduced in the House four days later declaring in favor of an annual revenue of $150,000,000. This resolution passed the House with only five dissenting votes, and its beneficial effect was shown by the advance of six per cent. bonds from 90 to 107. The New York Chamber of Commerce, on April 24th, adopted a memorial to Congress declaring "that the masses of the people are ready and desirous to contribute their quota to the ordinary and extraordinary revenues of the country," and that the public expenditures demanded an annual revenue of at least $250,000,000.

It was not until his annual report of 1863 that Secretary Chase awakened to the importance of taxation as a means of supporting the public credit, and suddenly expressed his desire for providing "for the largest possible amount of extraordinary expenditures by taxation." The net ordinary receipts, exclusive of loans, were $51,919,261 for the fiscal year ending June 30, 1862; $112,094,945 for the fiscal year 1863; $243,412,971 for 1864; $322,031,158 for 1865; and $519,949,564 for 1866. If these figures could have been moved backwards a single year, the effect upon the credit of the government, the price of gold, and the depreciation of the legal tender paper would have been striking, even

if the change had not made it unnecessary to depart from the metallic standard. It is probable that of the $6,844,571,431 computed [1] as the cost of the war up to the resumption of specie payments in 1879, $2,000,000,000 could have been saved to the tax-payers and the public debt would no longer exist. Outside and beyond these considerations, moreover, was the injury done to depositors in savings banks and to other creditors by payment in a depreciated dollar, and the injury to laborers, whose wages were far from keeping pace with the advance in paper prices. [2]

It has been necessary to refer to the financial policy of Secretary Chase in order to show the conditions out of which grew the national banking system. The system was a part of the Secretary's policy of carrying on the war by means of loans, and was intended to make a market for American securities and to maintain their price. One of the first effects of the suspension of specie payments was the increase of the

[1] Bolles, III., 244. Mr. Edward Atkinson computes the war expenditures for the seven years, 1862 to 1868, exclusive of the peace establishment, at $4,150,000,000, of which "not less than $2,200,000,000 was paid for war material and supplies, the prices of which were raised by the depreciation of bad money." The average advance in prices in the four years of war over the prices of 1860 was 87 per cent., which increased the cost of material of war $1,000,000,000. Since that time we have paid more than five per cent. interest for thirty years on seven-tenths of this sum, amounting to $1,050,000,000. —"The Cost of Bad Money," *Harper's Weekly*, Oct. 12, 1895, XXXIX., 964.

[2] Wholesale prices followed the gold premium in a majority of cases at once or at an interval of about a month, but the advances in many retail lines were undoubtedly much more rapid. Wholesale prices, moreover, remained stationary for nearly a year after the gold premium began to fall, and then only followed it downward at long removes. See the admirable article of Fred Perry Powers, "The Greenback in War," *Pol. Sc. Q'rly*, March, 1887, II., 79. Mr. Atkinson, in the article quoted above, computes the transfer of profits from wage earners to speculators or capitalists, as the result of the legal tender laws, at $7,000,000,000 in the seven years 1862–68,—$40 per head annually, or $120 for a family of three, exclusive of enhanced payments directly for taxes, out of an average income of about $450 per family.

circulation of the existing banks. The banks were very prudently conducted when the war cloud first threatened, but they were soon confronted by a real demand for additional circulation to take the place of the gold which disappeared with the suspension of specie payments. The circulation of the country outside the Treasury, which had been $448,405,767 on July 1, 1861, had declined to $334,697,744 on July 1, 1862. The entire mass of specie in circulation on the earlier date, which was $246,400,000, had disappeared, except about $25,000,000 on the Pacific Coast. United States notes and demand notes had been pumped into the circulation to the amount of $125,905,665, but they did not fill the void left by the flight of gold and silver. The scarcity of currency was more than remedied by July 1, 1863, when the total had been swelled to $595,394,038, of which $312,481,418 was in United States notes and $238,677,218 in the notes of the State banks. The circulation of the latter had increased about $53,000,000 within the year.

Secretary Chase inquired in his first annual report in the autumn of 1861 whether, as the bank-note circulation constituted a loan without interest from the people to the banks, sound policy did not require that the advantages of this loan be transferred, in part at least, from the banks, representing only the interest of the stock-holders, to the government, representing the aggregate interest of the whole people. The Secretary suggested that Congress had power to control the credit circulation, and that circulating notes might be issued under national authority and secured by the pledge of United States bonds. He outlined the advantages of his proposed measure thus:

> Its principal features are, (1st) a circulation of notes bearing a common impression and authenticated by a common authority; (2d) the redemption of these notes by the associations and institutions to which they may be delivered for issue; and (3d) the security of that redemption by the pledge of United State stocks, and an adequate provision of specie.
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> In this plan the people, in their ordinary business, would find the

advantages of uniformity in currency; of uniformity in security; of effectual safeguard, if effectual safeguard is possible, against depreciation; and of protection from losses in discounts and exchanges; while in the operations of the government the people would find the further advantage of a large demand for government securities, of increased facilities for obtaining the loans required by the war, and of some alleviation of the burdens on industry through a diminution in the rate of interest, or a participation in the profit of circulation, without risking the perils of a great money monopoly.[1]

The Committee of Ways and Means of the House of Representatives set to work upon a bill and made a careful study of the banking laws of the various States. The Secretary's scheme was based upon the New York free banking law and had been urged upon Mr. Chase as early as August, 1861, by Mr. O. B. Potter of that State. Some improvements on the New York plan were incorporated in the bill of the committee. The provisions relating to the reserve fund were drawn largely from the banking laws of Louisiana, and other features were adapted from the laws of Ohio and Illinois. It was pointed out early in the public discussion of the plan that the volume of circulation would depend upon the price of bonds rather than upon the needs of the money market, and opposition was pronounced among the New York bankers. Thaddeus Stevens reported against the bill, and its necessity was postponed for the time being by the issue of legal tender notes. Mr. Chase returned to the subject in his annual report for 1862, and his language in favor of basing the monetary circulation on evidences of the public debt sounds very like that adopted by Mirabeau, in urging the issue of the *assignats* upon the French Assembly.[2] The Secretary declared:

Every dollar of circulation would represent real capital, actually invested in national stocks, and the total amount issued could always be easily and quickly ascertained from the books of the Treasury. These circumstances, if they might not wholly remove the temptation to excessive issues, would certainly reduce it to the lowest point, while the form of the notes, the uniformity of devices, the signatures

[1] *Report on the Finances*, 1861, 19.

[2] *Vide* Ch. xxiii.

of national officers, and the imprint of the national seal authenticating the declaration borne on each that it is secured by bonds which represent the faith and capital of the whole country, could not fail to make every note as good in any part of the world as the best known and best esteemed national securities.[1]

The time was more nearly ripe for such a device than in the preceding session, and a bill was promptly introduced in the House by Mr. Hooper of Boston, who had given much attention to the subject during the summer. Senator Sherman introduced a similar measure in the upper branch, which was passed and went to the House on February 12th. Much of the argument in the Senate was based upon the fact that the existing banks were increasing their circulation, without the restraining influence of specie payments, and were using the constantly swelling volume of government paper money as a means of redemption. The debate in the House was opened by Mr. Spalding of New York, who had enjoyed the doubtful honor of fathering the legal tender law. The bill passed the Senate by a vote of 23 to 21; passed the House on February 20th by a vote of 78 to 64, and received the signature of the President on February 25, 1863. The measure proved to be defective in some of its details, however, and was superseded by the Act of June 3, 1864. Banks to the number of 134 had been organized when the Comptroller of the Currency made his first report in November, 1863, but no notes appeared until late in December. The system was hardly in operation, therefore, until the war was within a year of its end, but the fact that it had been authorized undoubtedly contributed to create a market for securities and to maintain their price.

The essential feature of the new banking law, so far as concerns circulation, was the provision that circulating notes should be issued by the Comptroller of the Currency upon deposits of United States bonds, to the amount of ninety per cent. of the face value of the bonds. No bank could be organized with a less capital than $100,000, except in places with a population not exceeding six thousand, where a

[1] *Report on the Finances*, 1862, 18.

bank might be organized, with the approval of the Secretary of the Treasury, with a capital of not less than $50,000. At least fifty per cent. of the capital was required to be paid up before beginning business and the remainder in instalments of ten per cent. of the whole amount of the capital at the end of each month. The bond deposit was fixed at not less than $30,000 nor less than one-third the capital stock. Provision was afterwards made by the Act of June 20, 1874, for the withdrawal of circulating notes at the option of the banks and the surrender of an equivalent amount of bonds by the Treasury, provided that the amount of bonds on deposit should not be reduced below $50,000. The limit was further reduced in 1882, for banks having a capital of $150,000 or less, to one-fourth of their capital stock, but limitations were set upon both the retirement and the issue of new circulation. The withdrawal of currency was not permitted to proceed at the rate of more than $3,000,000 per month for the entire country, and a bank reducing circulation was not entitled to receive any increase for the period of six months from the time it made a deposit of lawful money, in lieu of the bonds, for the redemption of outstanding notes.[1]

The new banking currency was put upon the same depreciated paper basis as the bonds and legal tender notes of the government. It could not have circulated otherwise in common with United States notes, for it would have been at a premium, like gold, or would have been presented to the banks for redemption in gold for hoarding. The law made the notes redeemable in "lawful money." Redemption of this sort was simply the exchange of a note secured by one government obligation for another, and was of so little value that the banks were seldom troubled by the presentation of their notes, although they were required to carry large quan-

[1]This limitation proved troublesome to a few banks which desired to take out circulation quickly during the panic of 1893. The limitation upon taking new circulation was repealed by the Act of March 14, 1900, and the limit upon withdrawals was increased to $9,000,000 per month by the Act of March 4, 1907.

tities of legal tenders as a part of their lawful reserve.[1] The banks in Albany, Baltimore, Boston, Cincinnati, Chicago, Cleveland, Detroit, Louisville, Milwaukee, New Orleans, New York, Philadelphia, Pittsburg, St. Louis, San Francisco, and Washington were required to keep a reserve in lawful money equal to twenty-five per cent. of their aggregate notes in circulation and deposits. Banks outside of these "reserve cities" were required to keep a reserve of at least fifteen per cent., but three-fifths of the reserve in these cases might be deposited with banks in the "reserve cities."

Hugh McCulloch was the first Comptroller of the Currency appointed under the new law, and it is to his ability and good judgment that much of the success of the new banking system was due. He had been president of the admirably managed Bank of the State of Indiana, and went to Washington in 1862 to oppose the national banking bill. His opinions underwent a change after the bill was amended in the following year and became a law, but it was with some surprise that he received the invitation to become the head of the new system. He stipulated for absolute control over the choice of his employees and for permission to resign the place as soon as the system was well organized. The First National Bank of Philadelphia was the first authorized to begin business, on June 20, 1863. Several other certificates were issued on the same day, but the Western banks were generally more prompt to come into the national system than those of the East. Mr. McCulloch discusses some of the objections to the new system and the manner in which he met them, in the following passage of his memoirs :

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[1] It was the distinct proposal of Secretary Chase that the notes should be payable, "after resumption, in specie, by the association which issues them, on demand ; and if not so paid will be redeemable at the Treasury of the United States from the proceeds of the bonds pledged in security."—*Report on the Finances*, 1862, 17. But this safeguard was not adopted, and the banks continued, long after resumption by the Treasury, to redeem their notes only in paper money.

There were four causes for the unwillingness of the State banks to become national banks.

First: The apprehension that the national system might prove to be a repetition of the free-bank system of the West, which had been a disreputable failure.

Second: The opinion that in becoming national banks, and issuing notes secured by Government bonds, their interests would be so identified with the interests of the Government, their credit so dependent upon, so interwoven with, the public credit, that they would be ruined if the integrity of the Union should not be preserved.

Third: the danger of hostile legislation by Congress, or the annoyances to which they might be exposed by Congressional interference with their business for partisan purposes.

Fourth: The requirement, that in order to become national banks, they must relinquish the names to which they had become attached, and be known by numerals.

I had no great difficulty in satisfying the bankers with whom I had personal interviews or correspondence that three of these objections were unsubstantial. In answer to the first, I pointed out the important particulars in which the national system differed from the free-bank system of the West, in the requirement that the capitals of the national banks should be real, and fully paid up; that their circulation was to be secured by United States bonds, with ten per cent. margin; that in case of the failure of a bank, its notes would be at once redeemable at the United States Treasury; that all the banks would be subjected to frequent examinations by men appointed by the Treasury Department. In answer to the second, I took the ground that the interests of the State banks were already so involved with those of the Government, that the fate of the latter would be the fate of the former also; that whether they remained State banks or became national, they would stand or fall with the Government. In answer to the third, I expressed the opinion that there was as little to fear from Congressional as from State legislation; that if there was trouble to be apprehended in either direction, it would be in the control which the banks might have over Congress, rather than in annoying interference by Congress with their legitimate business. To the fourth I could make no reply. It seemed to me to be unreasonable that the State banks should be required, in order to be converted into national banks, to surrender the names that had been made honorable by the manner in which their business had been conducted, and accept for a name, a number.[1]

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[1] *Men and Measures of Half a Century*, 168, 169.

The last point was finally conceded by the Secretary, and banks were allowed to retain their old names with the prefix "national." When this was yielded, says Mr. McCulloch, "they came into the national system with a rush,—Boston, as is her wont in all enterprises, taking the lead." An Act was passed in 1873 forbidding the use of the word "national" in the titles of banking institutions not organized and transacting business under the National Currency Act.

The destruction of the State banks as banks of issue by taxation was not a component part of the national banking system at its origin. Secretary Chase, in his first annual report, suggested the possibility of taxation, in order to transfer to the government some of the profits of circulation, and he remarked, in his second annual report for 1862, that he had "heretofore advised the imposing of a moderate tax on corporate circulation, and now renews the recommendation as the best means of reduction and gradual substitution." The first banking act provided that any State bank holding United States bonds to the amount of fifty per cent. of its capital stock might deliver them to the United States Treasurer and receive circulating notes equal to eighty per cent. of the face value of the bonds transferred, and that upon the failure of such a bank the bonds should be declared forfeited to the United States and the circulating notes should be redeemed and paid at the United States Treasury. These provisions for State banks were omitted from the Act of June 3, 1864, and Comptroller McCulloch, in his annual report for 1864, suggested the query whether "the time has not arrived when all these institutions should be compelled to retire their circulation?" He stated that he had not felt like recommending such action "as long as there was any uncertainty in regard to the success of the national banking system," and he limited his recommendations to taxation "which should be sufficient to effect the object without being oppressive."[1] The result was a provision in the Revenue Act of March 3, 1865, laying a tax of ten per cent.

[1] *Report on the Finances*, 1864, 54.

per annum upon the circulation of State banks paid out by them after July 1, 1866. This provision, therefore, did not take effect until a year after the practical close of the war, and was intended to drive the State banks out of competition with the national system and to enlarge the market for United States bonds.

There was still in circulation on July 1, 1864, $179,157,717 in State bank-notes and only $31,235,270 in national bank-notes. The State bank-notes amounted to $142,919,638 on July 1, 1865, three months after Appomattox, but had been slightly surpassed by the national bank-notes, which now amounted to $146,137,860. The arrival of the date for the enforcement of the ten per cent. tax, a year later, found $19,996,163 in circulation in State bank-notes and $276,012,713 in national bank-notes. The State bank-notes dwindled to $4,484,112 a year later, and their last appearance in the Treasury reports was on July 1, 1876, when the amount was stated at $1,047,335. The Act levying the ten per cent. tax was several times revised and was extended in the Act of March 26, 1867, to every national or State banker paying out the notes of any town, city, or municipal corporation after May 1, 1867.[1] The law was finally re-enacted by sections 19, 20, and 21 of the Act of February 8, 1875, so as to apply the ten per cent. tax to persons, firms, or corporations

[1] The Attorney General, on November 21, 1893, in an opinion regarding a clearing house certificate of deposit, declared that the paper was "not within the meaning of the statute," and cited the rule of law that "If there is any doubt as to the meaning of the statute imposing this tax the doubt must be resolved in favor of exemption."—*Official Opinions of the Attorneys General*, XX., 682. The Solicitor of the Treasury gave an opinion on September 28, 1894, in regard to a proposed issue of county bonds of small denominations for use as a local currency, "that no statute of the United States prohibits the issue of county bonds in any denomination." He also observed "that the word 'county' is not enumerated among the corporations, banking associations, etc., mentioned in the statute; nor can the word 'notes' be held to include county bonds." Both these opinions referred to the similar language of the Act of February 8, 1875, then in force.

paying out their own notes or those of any person, firm, or corporation other than a national banking association.[1]

Several of the States passed laws to aid the State banks in organizing under the national system and many of them made the change during the years 1864 and 1865. The number of banks organized for the year ending October 31, 1864, was 453 with an aggregate capital of $79,366,950, and the number organized for the year ending October 31, 1865, was 1014 with an aggregate capital of $242,542,982. This was the year during which the impending levy of the ten per cent. tax drove nearly all banks desiring to continue their circulation into the new system. The number of organizations for the year ending October 31, 1866, was only 62 and for the next year only 10. The reorganization was accomplished with little friction and without arresting the ordinary business of the banks. The stocks of many of them increased in value and Comptroller McCulloch declared in 1864 that he knew "of no instance in which their real market value had been injuriously affected." Congress gave a preference by an Act of March 3, 1865, to State banks not having over $75,000 of capital in entering the national system, but, in view of the ten per cent. tax on their notes, it was a rather humorous observation which was made by Comptroller Clarke, who succeeded Mr. McCulloch, that "nearly all of the State banks voluntarily changed."

The original limit imposed on the national bank circulation was $300,000,000, and it was provided that $150,000,000 should be apportioned to banks in the States and Territories according to population and the remainder at the discretion of the Secretary of the Treasury, with due regard to existing banking capital, resources, and business. Some conflict

[1] These sections refer in every case to "notes" or "circulating notes," and Mr. Edward Atkinson of Boston has expressed the conviction that they do not impose any tax upon certificates of deposit given by national, State, or private bankers to their depositors, even though such certificates might be printed for even amounts and used for general circulation.—*Journal of Commerce and Commercial Bulletin*, Monday, July 29, 1895.

resulted between this provision and that giving preference to the State banks, and the Comptroller permitted the organization of the latter without limit. No stable State banks existed in some of the Western States, so that their share of banking capital was reduced to a minimum, and the difficulty was increased with the restoration of the Southern States to the Union. The Act of July 12, 1870, therefore, authorized an increase of $54,000,000 in the bank-note circulation, to be apportioned to banks "in those States and Territories having less than their proportion," and a new apportionment was directed to be made as soon as practicable, based upon the census of 1870. Provision was also made for withdrawing $25,000,000 of circulation from banks in States having an excess.

The withdrawal of circulation was found to be difficult, because the notes did not reach the banks or the Treasury for redemption. It was only for the interest of the stockholders of new banks to compel redemption, by paying a premium to brokers to sort out notes subject to withdrawal and send them to the Treasury. The inflation bill vetoed by President Grant in 1874 contained a provision for adding $46,000,000 to the bank-note circulation. Congress took a new tack after the veto, and provided for the withdrawal of $55,000,000 of circulation from States having an excess and its issue in States having a deficiency. This Act,—that of June 20, 1874,—was the first to provide for the voluntary retirement of circulation by the deposit of lawful money with the United States Treasurer and the return of the bonds to the bank. The panic of 1873 and the redundancy of currency which followed, led to the voluntary retirement of circulation, so that no requisitions upon the Eastern banks were required to execute the Act of 1874. The Act for the resumption of specie payments, approved January 14, 1875, wiped out any specific limitation upon the amount of national bank-notes and declared that "each existing banking association may increase its circulating notes in accordance with existing law without respect to said aggregate limit; and the provisions of law for the withdrawal and

re-distribution of national bank currency among the several States and Territories are hereby repealed."

The national banks bore an honorable part in bringing about the resumption of specie payments. A few bankers who had extended their speculations beyond legitimate limits undoubtedly desired to see the *régime* of irredeemable paper perpetuated, but the majority were earnestly in favor of return to a specie basis. Secretary McCulloch strongly urged resumption in his first annual report in 1865 and was authorized by the Act of April 12, 1866, to receive legal tender notes for bonds and cancel the notes to an amount not exceeding $10,000,000 in the first six months and $4,000,000 in any one month thereafter. The maximum price of gold, which had been 233.75 in 1865, was 167.75 in 1866 and 145.625 in 1867. Secretary McCulloch reduced the outstanding legal tenders from $422,424,007 on March 31, 1866, to $356,000,000 in February, 1868. The fear of contraction, stimulated by the reaction from the fever of the war speculation, seized upon Congress and the further retirement of legal tender notes was forbidden by the Act of February 3, 1868.

The Resumption Act was the outcome of a caucus committee appointed by the Republicans in December, 1874, to frame a measure upon which the party could unite. The previous session had witnessed the passage of the inflation bill, increasing the limit of legal tender issues to $400,000,000 and authorizing an addition of $46,000,000 to the bank-note circulation, to be distributed to banks in the West and South. The bill was vetoed by President Grant and the inflation fever was checked. The Resumption Act was hurried through Congress within six weeks after the beginning of the session and was intentionally left in clumsy and ambiguous shape in order to hold votes. Senator Schurz of Missouri repeatedly inquired of Senator Sherman, who had the bill in charge, whether the legal tender notes redeemed in coin, as proposed by the bill, were to be retired and cancelled. Mr. Sherman refused to give a definite reply and Mr. Schurz voted with the Democratic Senators against

the bill.[1] Its redeeming feature was the provision for the resumption of specie payments at the New York sub-Treasury on January 1, 1879, and the issue of bonds to obtain the necessary coin.

The success of specie resumption depended largely upon the action of the banks. They held more than $125,000,000 in legal tender notes, of which nearly one-third was in New York City. A run upon the sub-Treasury for gold by means of these notes would have quickly compelled a new suspension of specie payments. The subject of resumption was discussed by the banks and a committee was appointed to confer with Secretary Sherman and agree upon a common course of action to sustain the public credit. The Assistant Treasurer at New York was invited to become a member of the Clearing House and balances between the banks and the Treasury were proposed to be settled through the Clearing House. The banks voluntarily decided to decline receiving gold as a special deposit, to abolish special exchanges of gold checks at the Clearing House, and to receive and pay balances without discrimination between gold and legal tender notes. This action dissipated all serious fear of the success of resumption, and on December 17, 1878, gold sold at par in the gold room of the New York Stock Exchange. The banks, in the language of Mr. Bolles, at the beginning of the war "parted with their gold to aid the government, and now, when resumption was accomplished, they were content to take whatever it desired to give."[2]

It was the policy of the Resumption Act to reduce the volume of United States legal tender paper at the rate of 80 per cent. of the new national bank-notes issued and to continue redemption until the legal tenders should be reduced to $300,000,000. The expectation that the bank currency would rapidly expand to fill the void left by the retirement of the legal tenders was not fulfilled. The circulation

[1] Mr. Sherman, when Secretary of the Treasury, resolved this doubt in his annual report for 1877, in favor of re-issuing the notes, but his opinion was soon deprived of practical importance by the resolution of May 31, 1878, forbidding the further retirement of legal tender notes.

[2] *Financial History of the United States*, III., 301.

secured by bonds reached a maximum of $350,692,966 on December 1, 1873, and fell rapidly from that time until November 1, 1876, when the amount was $301,658,372.[1] The price of bonds as well as the redundancy of currency was beginning to exercise the restraining influence on bank-note circulation which in subsequent years forced it within a narrow compass. The contraction of the bank-note circulation and the retirement of government currency alarmed the advocates of an ample money supply and led to the resolution of May 31, 1878, providing for a second time that it should not be lawful "for the Secretary of the Treasury or other officers under him to cancel or retire any more of the United States legal tender notes." The volume of legal tenders in circulation on the day the Act became law was $346,681,016, and has remained rigid at this amount since that date, except for the addition of the Treasury notes issued under the Sherman law and the temporary retention of notes in the Treasury.

There was a slight tendency to increase bank-note circulation for a time after the revival of business in 1880,[2] but the increase was sharply arrested in the winter of 1881 by the passage of a bill requiring the banks to deposit a new issue

[1] The aggregate circulation on the earlier of these dates was $352,621,762 and on the later date $323,241,308. The difference between "secured" and actual circulation is made up by deposits of lawful money with the United States Treasurer for the redemption and cancellation of notes still outstanding, for which the bonded security has been withdrawn by the banks. This "lawful money" fund is reduced as fast as the notes are redeemed from it and retired, but the withdrawal of bonds was so rapid that the amount ran as high as $107,588,447 on July 1, 1887. The fund stood at $54,207,975 when the Act of July 14, 1890, (Section 6) directed that it "be covered into the Treasury as a miscellaneous receipt" and that redemptions be made thereafter from the general cash. The notes outstanding redeemable in lawful money on September 30, 1908, were $48,639,442.

[2] One of the causes of the decline in secured circulation, as the date approached for the resumption of specie payments, was the fact that the price of the bonds was falling in currency in order to accommodate itself to the gold basis. This made it profitable to sell before the premium disappeared, as the currency obtained for the bonds was appreciating in value as it approached parity with gold.

of three per cent. refunding bonds as security for circulating notes. This limitation on the class of bonds was accompanied by a drastic provision repealing the authority to reduce circulation and withdraw bonds. The banks generally preferred to retain the existing bonds, paying higher rates of interest, even with the loss of circulation, than to submit to such a measure, and 141 banks hastened to deposit $18,764,434 in lawful money for the retirement of their notes and the withdrawal of their bonds in anticipation of the enactment of the bill. The measure was vetoed by President Hayes, but the result upon the secured circulation was to reduce it from $322,654,721 on February 1, 1881, to $305,587,202 on March 1, 1881. Many of the bonds were deposited again after the adjournment of Congress and the circulation increased to $332,398,922 on January 1, 1882. A gradual decline, whose results may be observed in the following table, marked the history of the secured circulation from 1882 to 1892:

JANUARY 1ST.	AUTHORIZED CAPITAL STOCK.	CIRCULATION SECURED BY BONDS.	TOTAL NOTES OUTSTANDING.
1873	$487,781,551	$344,582,812	$347,066,898
1874	499,003,401	348,624,953	350,848,236
1875	503,347,901	342,333,837	354,128,250
1876	511,155,865	324,484,539	346,479,756
1877	501,392,171	302,020,242	321,595,606
1878	485,557,771	309,890,415	321,672,505
1879	471,609,396	313,218,189	323,791,674
1880	461,557,515	328,773,639	342,387,336
1881	467,039,084	322,832,101	344,355,203
1882	470,018,135	332,398,922	362,421,988
1883	492,076,635	322,386,120	362,651,169
1884	518,031,135	310,953,321	350,482,828
1885	529,910,165	285,496,055	329,158,623
1886	534,378,265	274,466,748	317,443,454
1887	555,865,165	205,316,106	296,771,981
1888	584,726,915	165,205,724	268,398,878
1889	598,239,065	146,372,588	233,660,027
1890	623,791,365	127,742,440	197,230,405
1891	665,267,865	125,660,361	177,287,846
1892	685,762,265	140,084,203	173,078,585
1893	695,148,665	150,526,651	174,404,424
1894	693,353,165	185,194,522	208,538,844
1895	670,906,365	176,667,466	206,513,653
1896	664,076,915	190,616,160	213,627,821

It is obvious that a currency system whose permanent circulation was reduced to $125,000,000 for a population of 63,000,000, had ceased to serve one of the chief purposes for which it was created. The causes are to be found in the rapid payment of the national debt, which reduced the possible basis for circulation; the high price of bonds, which reduced the profit on circulation; and the steady stream of silver money which was pumped into the monetary system under the laws of 1878 and 1890, crowding out other forms of currency. Hostility to the national banks, though frequently expressed in the southern and western parts of the country, was a result rather than a cause of their shrinking circulation. There was filibustering in Congress against the bill to extend their charters, but the fact that their discounts and deposits remained unshaken is the best proof that the business community never seriously doubted that the system would survive. The original law gave the banks corporate powers for twenty years and the new bill proposed their continuance for another twenty years. Mr. Crapo, of Massachusetts, who was in charge of the bill in the House, failed twice to secure consideration, because under the rules it required a two-thirds vote, but he obtained the necessary votes on May 1, 1882, and the bill passed the House on May 17th, by a vote of 125 to 67. It passed the Senate with amendments on June 22d and became law on July 12th.

The essential cause of diminishing circulation was financial rather than political and was chiefly found in the growing wealth and credit of the country. The bonded debt of the United States shrivelled from $1,639,567,750 on June 30, 1881, to $610,529,120 on June 30, 1891, and the result was the wiping out of two large bond issues and almost the extinction of a third. The national banks, which had $360,488,400 in bonds on deposit to secure circulation at the earlier date, had only $142,508,900 on deposit at the later date, although the proportion to the whole remained almost exactly the same. The price of bonds, as secure gold investments, rose to such a point that their investment value fell far below three per cent., and their price was enhanced by

the large purchases by the government in advance of maturity made necessary by the enormous surplus accumulating in the Treasury. These purchases of bonds at a premium, exclusive of redemptions at par at maturity, were $51,464,300 for the fiscal year 1888; $120,674,450 for the fiscal year 1889; $104,546,750 for the fiscal year 1890; and $45,175,200 for the fiscal year 1891, after which purchases ceased. The highest average price paid by the government for four per cent. bonds was 128.66 in 1889, when $38,106,400 were purchased. The lowest average price was 124.23 in 1891, two years nearer maturity, when $42,641,250 were purchased.[1] These bonds remained, after the maturity of the four and a half per cent. loan in 1891, the chief source of security for national bank-note circulation, and their price, including the premium, could be more profitably loaned in many cases in the open market than by obtaining ninety per cent. of the par value of the bonds in circulating notes.[2] The clamor of demagogues against the "double interest" derived from the circulating notes and the interest on the bonds was less eloquent of the facts than the steady withdrawal of bonds because circulation had ceased to be profitable. The increase in circulation since 1891 has been due to the fall in the premium on the bonds as they have approached maturity and to special causes, referred to elsewhere, connected with the crisis of 1893 and the bond issues of 1894, 1895 and 1896.

The effect of the increase of the silver circulation under the Bland-Allison Act of 1878 and the Sherman compromise Act of 1890, in driving bank-notes out of existence can only be roughly estimated. It was probably much less potent

[1] These figures are taken from a communication of Secretary Carlisle to the Senate, Sept. 26, 1893, in response to a resolution of that body.—Sen. Ex. Doc. 18, Fifty-third Congress, 1st Sess.

[2] The recommendation was several times made by the Comptroller of the Currency, and embodied in bills introduced in Congress, after the resumption of specie payments, that the banks be authorized to issue circulation to the face value of the bonds deposited as security, instead of ninety per cent. of that value; and such a provision was finally made in the Act of March 14, 1900.

than the rise in the price of bonds, and had more effect in expelling gold than bank-notes from the circulation. The Bland Act, which was passed over the veto of President Hayes on February 28, 1878, authorized the Secretary of the Treasury to purchase not less than $2,000,000 nor more than $4,000,000 worth of silver monthly and coin it into standard silver dollars of 412½ grains each, nine-tenths fine. Every Secretary of the Treasury confined his purchases closely to the minimum and the aggregate purchases, until the act was superseded by the Act of 1890, were 291,272,019 fine ounces, at a cost of $308,279,261, which was coined into 378,166,793 standard silver dollars. The Act of 1890, which was approved by President Harrison on July 14th, took effect thirty days after its passage and provided for the monthly purchase by the Secretary of the Treasury of four and a half million ounces of silver bullion at the market price, and the issue of Treasury notes "redeemable on demand in coin," in payment for the bullion. The purchases under this act were 168,674,682 fine ounces of silver at a cost of $155,931,002. These two measures added to the circulation, therefore, $534,097,795 in currency secured by silver, although the notes issued under the Act of 1890 are redeemed in gold, and have been treated in most respects by the government upon the same footing as other United States legal tender notes. The provision of the Act of 1890 authorizing purchases of silver bullion was repealed on November 1, 1893, but the portion repealing the Act of 1878 was left in force, so that all purchases of silver ceased on that date. The currency in circulation outside the Treasury on that date was $1,718,544,682, of which $498,121,679 was stated to be in gold coin, $78,889,309 in gold certificates, $472,710,610 in the two forms of legal tender notes, $384,443,050 in silver and silver certificates, and only $197,745,227 in national bank-notes. The bank-notes formed less than one-eighth of the circulation, and the $11,566,766 in the Treasury formed a much smaller proportion of the money there held.

The redemption system established by the national banking act of June 3, 1864, provided for redemption in lawful

money of the United States at the office of the issuing bank and at some designated bank in a reserve city. The banks of the reserve cities were required to have a redemption agent in New York. The fact that the notes could be redeemed only in government paper money, which was of no greater value than the notes, prevented any general movement for redemption and gradually filled the channels of circulation with worn and mutilated currency. The notes of the banks distant from the reserve cities drifted only slowly into the redemption agencies and they were rarely sent at the expense of the bank which received them to the issuing bank for redemption. Several propositions were made to enforce prompt redemption, but nothing was enacted into law until 1874. The banks were required by an act of that year to pay into the Treasury of the United States a fund equal to five per cent. of their circulation, which was to be constantly kept good, for the redemption of mutilated notes. Mutilated notes received by any of the banks or the sub-Treasuries were to be sent to Washington for redemption and the expenses of the entire redemption agency and of the transportation of the notes were charged against the banks and then taken from the five per cent. fund.

Redemptions under the new system have been sufficiently rapid to withdraw notes which are badly worn, but have not been rapid enough to give elasticity to the volume of the currency. Where redemptions under the Suffolk system, with a circulation of $40,000,000, were $400,000,000 per year, redemptions under the national system were never higher, down to June 30, 1907, than 65.84 per cent. of average circulation for the year, and were often below 40 per cent. The maximum proportion was attained in 1905, when redemptions were $308,298,760 with an average circulation of $468,285,475, but the proportion of redemptions fell in 1906 to 55 07, and in 1907 to 40.77 per cent. Annual redemptions under the Suffolk system, therefore, were ten times the circulation, while those under the national system have been less than one-half of the circulation. Economy of management was greatly in favor of the Suffolk system. For the

fiscal year 1907, under the national system, with an average circulation of $589,445,599, and redemptions of $240,314,681, the charges, exclusive of transportation, were $160,549, or at the rate of about 67 cents per $1000. This rate, while much lower than the charges for earlier years, compares with a charge per $1000 under the Suffolk system of about ten cents.[1]

The original banking act authorized the Comptroller of the Currency to appoint suitable persons to make examinations of the affairs of the banks at such times as the Comptroller thought proper and to make a full report to him. These officials were to be paid by the banks, but the expense was a charge levied by the Comptroller, and fixed by him, so that it did not make the examiner in any way subservient to the bank. Examinations were originally made on an average of about once a year, and other information was obtained by the Comptroller from four reports of condition required during the year, not at the end of each quarter, but at such dates as he saw fit to designate. The frequency of these reports was increased in 1870 to five per year, and the examinations were gradually made more severe as defects in the existing system were disclosed. The same person made all the examinations within a given district until the spring of 1893, when Comptroller Eckels adopted the plan of shifting the examiners of adjoining districts from time to time and of making two examinations during the year instead of one. The original purpose of the system of examination was the protection of the government and of the stockholders against palpable fraud, and was not intended to remit in any degree the vigilance of the directors of the banks. The public came by degrees to look more and more to the government examinations for the assurance of the soundness of the banks, and the system has become one of the most important and characteristic features of American banking.

The rapid expansion of the banking business of the country is indicated in the following table, showing the number

[1] Report on the Finances, 1907, 235–37. Total cost of redemptions from 1874 to 1907 was $5,695,609, which included transportation charges of about $2,100,000.

of national banks, with discounts and individual deposits[1]:

YEAR.	NO. OF BANKS.	LOANS AND DISCOUNTS.	INDIVIDUAL DEPOSITS.
1864	139	$ 10,666,095	$ 19,450,492
1865	638	166,448,718	183,479,636
1866	1,582	500,650,109	522,507,829
1867	1,648	608,771,799	558,699,768
1868	1,642	616,603,479	534,704,709
1869	1,628	644,945,039	568,530,934
1870	1,615	688,875,203	546,236,881
1871	1,648	725,515,538	507,368,618
1872	1,790	818,996,311	596,586,487
1873	1,940	885,653,449	598,114,679
1874	1,976	856,816,555	540,510,602
1875	2,027	955,862,580	682,846,607
1876	2,086	962,571,807	618,517,245
1877	2,082	929,066,408	619,350,223
1878	2,074	881,856,744	604,512,514
1879	2,051	823,906,765	643,337,745
1880	2,052	933,543,661	755,459,966
1881	2,095	1,071,356,141	1,006,452,852
1882	2,164	1,169,177,557	1,102,679,163
1883	2,308	1,230,456,213	1,066,901,719
1884	2,529	1,307,491,250	1,106,453,008
1885	2,664	1,234,202,226	987,649,055
1886	2,732	1,343,517,559	1,111,429,914
1887	2,875	1,470,157,681	1,169,716,413
1888	3,070	1,583,941,484	1,235,757,941
1889	3,150	1,676,554,863	1,331,265,617
1890	3,326	1,811,686,891	1,436,402,685
1891	3,573	1,932,393,206	1,485,095,855
1892	3,692	2,001,032,625	1,602,052,766
1893	3,784	2,166,615,720	1,764,456,177
1894	3,787	1,871,574,769	1,539,399,795
1895	3,737	1,974,623,974	1,695,489,346
1896	3,706	2,020,961,792	1,720,550,241
1897	3,661	1,901,160,110	1,639,688,393
1898	3,607	2,100,350,318	1,916,630,252
1899	3,590	2,214,394,838	2,225,269,813
1900	3,602	2,479,819,494	2,380,610,361
1901	3,942	2,706,534,643	2,623,997,521
1902	4,291	3,038,255,447	2,964,417,965
1903	4,766	3,350,897,744	3,159,535,591
1904	5,180	3,469,195,043	3,300,619,898
1905	5,528	3,728,166,086	3,612,499,598
1906	5,911	4,071,041,164	4,088,420,135
1907	6,288	4,463,267,629	4,115,650,294
1908	6,625	4,585,337,094	4,105,814,418
1909	6,865	4,840,367,677	4,720,284,640

[1] These figures are taken from the reports of condition called for by the Comptroller, and the dates are those of the reports nearest to the first day of the year for which they are given.

The suspension of purchases of silver bullion and the issue of circulating notes under the Sherman law left the United States, in view of the limitations of the national bank-note circulation, without any means of materially increasing their currency. The importance of a currency system more adapted to commercial needs, and capable of greater expansion in the South and West, was under discussion among Democratic leaders for several years before the panic of 1893 and began to assume definite shape during the discussion on the repeal of the Sherman law. It was believed by many that the clamor for the free coinage of silver was largely stimulated by the lack of an elastic circulating medium in the newer sections of the country and that this clamor would end, except in the small silver-producing States, if such a medium were provided. The democratic national platform, adopted at Chicago, June 21, 1892, contained the declaration, "We recommend that the prohibitory ten per cent. tax on State bank issues be repealed." This declaration was not interpreted by conservative members of the party in the North as a declaration for unconditional repeal, and when that question was submitted to the House of Representatives on June 6, 1894, it was rejected by a vote of 102 in the affirmative and 172 in the negative, the negative vote including 74 Democrats, nearly all from the Northern States.

The necessity of some new banking legislation was strongly urged upon President Cleveland by Representative Oates of Alabama and other prominent members of Congress while the repeal of the Sherman law and the tariff bill were pending. The President spoke in an encouraging manner of the necessity of currency reform, but he refrained from complicating the other issues before Congress by any specific recommendations until the meeting of the short session on December 3, 1894. The dissatisfaction with the system of note issues authorized by the national banking law and the belief that a different system must be substituted had been steadily growing, and the adoption of a new system was advocated by many of the most influential bankers of New

York and Boston. A convention of bankers at Baltimore on October 18, 1894, declared in favor of permitting the issue of circulating notes by existing national banks up to the amount of 50 per cent. of their paid-up capital, secured by general assets and by a guarantee fund deposited by the banks with the United States Treasurer. This guarantee fund was to be paid into the Treasury to the amount of two per cent. of the circulation of the banks the first year and thereafter at the rate of one-half of one per cent. per year until the entire amount was five per cent. of the outstanding circulation, and the government was to have a first lien upon all the assets of a failed bank, in order to ensure the redemption of the notes to the holders. An emergency circulation was also authorized to the amount of 25 per cent. of the capital, subject to a heavy tax upon the average amount outstanding for the year. The exact rate of this "heavy tax" was not specified, but its purpose was to compel the retirement of the "emergency circulation" when the demand for money was not acute enough to justify a high rate of interest.

Manifestations like these paved the way for the formal presentation of the subject to Congress in the message of President Cleveland and the annual report of Secretary Carlisle. The President urged in emphatic language the necessity of radical currency reform, but he left the exposition of the details to his minister of finance. The need of action was emphasized by the large exports of gold and the continuous pressure of the redundant paper upon the dwindling gold reserve. The proposals of Secretary Carlisle for currency reform may be summarized in their important features as follows:

1. Repeal all laws requiring, or authorizing, the deposit of United States bonds as security for circulation.

2. Permit national banks to issue notes to an amount not exceeding seventy-five per centum of their paid-up and unimpaired capital, but require each bank before receiving notes to deposit a guarantee fund consisting of United States legal-tender notes to the amount of thirty per centum upon the amount of notes applied for.

3. Provide that the circulating notes shall constitute a first lien upon all assets of the issuing bank.

4. Provide a safety fund by taxation upon the banks for the immediate redemption of the circulating notes of failed banks and require the legal-tender guarantee fund of a bank which fails to be paid into the safety fund, the safety fund to be invested in United States bonds.

5. The Secretary of the Treasury may, in his discretion, use any surplus revenue of the United States in the redemption and retirement of United States legal-tender notes, but such redemptions shall not exceed an amount equal to seventy per cent. of the additional circulation taken out by national and State banks.

6. Suspend the ten per cent. tax on the circulation of banks duly organized under the laws of any State, transacting no other than a banking business, and complying with the second and third provisions. The guarantee fund in United States legal-tender notes was to be permitted to be kept by the State banks in their own custody, but must at all times equal thirty per cent. of the outstanding circulation.

Mr. Carlisle's bill was reported to the House with some amendments, but political divisions prevented its enactment. The fact that the Fifty-fourth Congress, which met on December 2, 1895, contained majorities politically hostile to President Cleveland, prevented action during the remainder of his term upon any plan of currency reform which might bear the stamp of an administration measure. The President confined himself to recommending measures for maintaining the gold reserve and protecting public credit. Secretary Carlisle simply renewed the recommendations, repeatedly made in former years by the Comptroller of the Currency, that the banks be given greater freedom of note issue by permission to issue circulation to the par value of the bonds deposited as security, and that the tax on circulation be reduced from one-half to one-quarter of one per cent. annually. He pointed out that until 1883 there was a tax upon the capital and deposits of national banks, as well as a tax upon their circulation, and that from all these sources the govern-

ment received up to the close of the fiscal year 1895 the sum of $146,902,962. From the tax on circulation alone the receipts amounted to $78,107,006, while the total estimated expenses of supervision, including salaries of officials, had been only $15,636,976. The average annual cost of supervision, declared the Secretary, "has been $473,848, while a tax of one-fourth of one per cent. on the average annual circulation would have yielded $680,294." The Secretary also stated that "The gain to the government on account of national bank-notes lost or destroyed, and which are consequently, never presented for redemption, is estimated to be two-fifths of one per cent. upon the total amount issued, and has, according to this estimate, amounted to the sum of $2,805,715." [1]

The necessity for banking legislation which should give greater flexibility to the note-issuing system, and protection to the Treasury, had continued to be urged by far-sighted

[1] The amount of paper currency lost or destroyed and never presented for redemption is much smaller than is popularly believed. No exact figures have ever been obtained, because notes of the oldest issues are occasionally received for redemption, and even an approximate estimate can be made only upon issues of many years standing. No calculation based upon such issues has shown a larger average loss, except upon the small fractional currency, than one per cent. and Secretary Carlisle's estimate of two-fifths of one per cent. is probably not too small. The percentage applies, however, to the entire issues rather than to the net amount in circulation at any one time. The entire issues of United States notes up to the close of the fiscal year 1895 were $2,725,981,808, and two-fifths of one per cent. of this amount would be about $10,000,000. The total issues of national bank-notes to October 31, 1895, were $1,906,918,995, and the proportion of estimated loss would be about $7,500,000. This loss, however, will not be realized until all the recent issues have been many years outstanding, which accounts for the variation from the estimate of Mr. Carlisle. One of the proofs of the small percentage of loss upon paper currency is furnished by the old demand notes, of which $60,030,000 were issued and only $54,847, or less than one-tenth of one per cent., were outstanding on June 30, 1895. These notes, however, having been received for customs in common with gold, did not remain so long in circulation as some other forms of paper currency. Of $1 and $2 notes in circulation in Canada on June 3, 1871, less than one per cent. were outstanding in 1894.—Breckenridge, 337.

financiers long after the effects of the crisis of 1893 had passed away. The banking question was overshadowed, however, in 1896, by the determined effort of Southern and Western Democrats and of the silver-mining interests to secure free coinage of silver. Against stubborn resistance in the East and a sharp contest in the Southern States, the silver element secured a majority of the delegates to the Democratic National Convention and adopted a resolution demanding "the free and unlimited coinage of both silver and gold, at the present legal ratio of 16 to 1, without waiting for the aid or consent of any other nation." Upon this platform Mr. William J. Bryan was nominated for President, and Mr. Arthur Sewall of Maine for Vice-President. A large number of delegates from the East refused to be bound by the declaration for free silver and subsequently, in September, 1896, with other Democrats who were opposed to free coinage of silver, held a convention at Indianapolis, which was notable for the presence of a majority of the historic leaders of the party in many of the States. This convention nominated Palmer and Buckner.

The Republican candidates were William McKinley of Ohio and Garret A. Hobart of New Jersey. It was doubtful up to the last moment before the meeting of the Republican Convention how positive would be the Republican indorsement of the gold standard, but ultimately the committee on resolutions agreed upon a declaration, which was accepted by the convention, that, until an international bimetallic agreement was attainable, the "existing gold standard must be preserved." Upon this platform the Republican candidates were elected, having an immense popular majority east of the Ohio River and north of the Potomac, but a large adverse majority in the remaining States taken as a whole.

The election of Mr. McKinley as President did not check the demand for radical reform in the monetary and banking system. This demand dealt with three branches of the subject—the affirmation of the gold standard, the retirement of the government notes, and the adoption of a more flexible bank-note currency. In order to crystallize the sentiment

of the business community, a movement was inaugurated in Indianapolis to call a general convention of representatives of chambers of commerce and other commercial bodies to deal with the subject. The chief mover in this step was Mr. Hugh H. Hanna of Indianapolis, and he became chairman of the executive committee which was charged with carrying out the purposes of the convention. A large convention was held in Indianapolis in January, 1897, which authorized the executive committee to appoint a monetary commission to deal with the subject, if such a commission was not appointed during the existing session of Congress. President McKinley sent to Congress a message recommending the appointment of a commission, but it was not acted upon. Thereupon the Indianapolis executive committee appointed a commission of citizens, composed of T. G. Bush, of Alabama; W. B. Dean, of Minnesota; ex-Senator George F. Edmunds, of Vermont; Charles S. Fairchild, of New York, formerly Secretary of the Treasury; Stuyvesant Fish, of New York, President of the Illinois Central Railroad; J. W. Fries, of North Carolina; Louis A. Garnet, of California, formerly Director of the Mint; Professor J. Laurence Laughlin, Professor of Political Economy at the University of Chicago; George E. Leighton, of Missouri; C. Stuart Patterson, of Pennsylvania; and Judge Robert S. Taylor, of Indiana.

This commission completed its report in December, 1897. A comprehensive plan was presented for dealing with each of the three essential elements of the problem. Gold was made the standard, all obligations of the United States were made payable in gold, and to carry out these declarations a separate division was created in the Treasury to be called the Division of Issue and Redemption, which was to be the custodian of the gold reserve. It was provided that the reserve should be maintained at twenty-five per cent. of the aggregate amount of United States notes and Treasury notes, then amounting to about $453,000,000, and also at five per cent. of the outstanding silver dollars, then amounting to $455,000,000. In order gradually to retire the government paper, it was provided that United States notes and Treasury

notes should be cancelled at once to the amount of $50,000,000, and afterwards in such further amounts as should not exceed the increase in national bank-note circulation.

The reform of the bank-note currency was provided for upon a graduated scale extending over nine years. The amount of bonds to be required to secure bank-notes was reduced to twenty-five per cent. of the capital of a bank, and at the end of five years this requirement was to be reduced by one-fifth annually. Thus circulation was gradually to be relieved from its relation to the bonds, but it was to be protected in the case of failed banks by a guaranty fund, made up at first of a deposit in gold coin of five per cent. of the amount of all notes issued and afterwards maintained by a graduated tax on circulation. This tax was not to be imposed, except at a nominal rate, upon notes up to sixty per cent. of banking capital, but was to be at the rate of two per cent. upon the next twenty per cent. of notes, and six per cent. upon notes in excess of eighty per cent. of capital.[1]

A bill carrying out this plan was introduced in Congress and was the basis of a measure reported by Representative McCleary of Minnesota in June, 1898. A petition to the Speaker of the House, asking consideration of this measure, was signed by 146 of the 206 Republican members of the House; but it was late in the session when this stage was reached, and upon the promise of President McKinley that the subject should be taken up with the party leaders at the following session of Congress in December, further effort to secure action was postponed until that time.[2] A Republican

[1] Preliminary Report of the Monetary Commission, 49–58. This report was also printed substantially in full in *Sound Currency*, January 1, 1898, V., 1–16. The work of the Commission was explained in an article by Mr. Fairchild, one of its members, in the *North American Review*, for February 1, 1898; also reprinted in *Sound Currency* February 1, 1898, V., 25–32.

[2] It is declared by Mr. Hepburn that "The Spanish War, which occurred at this time (1898), united the patriotic support of the country in favor of the administration. Republicans no longer entertained any doubt of McKinley's re-election and assumed a bolder attitude in favor of the gold standard."—*The Contest for Sound Money*, 400.

caucus of members of the House, held in February, 1899, authorized the appointment of a committee by its chairman to frame a measure before the meeting of the next Congress in December, 1899. This committee met at Atlantic City in April, while the Republican members of the Senate Committee on Finance met during the summer, and each presented a measure early in the following session. In the House the caucus bill was passed on December 18th by a vote of 190 to 150. In the Senate action was somewhat more deliberate, but a measure was passed on February 15, 1900, by a vote of 46 to 29. A conference was held on the differences between the two measures, and out of this conference emerged the Gold Standard Act of March 14, 1900.

The Act of 1900 did not essentially change the basis of the bank-note currency and did not provide for retiring the government notes. In establishing the gold standard, however, and providing for its maintenance, it followed in the main the lines laid down by the Indianapolis Commission, except that it failed to provide for the redemption of standard silver dollars in gold. A Division of Issue and Redemption was established in the Treasury, in accordance with the Indianapolis plan. The gold reserve was definitely fixed at $150,000,000, and was to be maintained, if necessary, by the sale of three per cent. gold bonds. All the bonded obligations of the United States were made payable in gold. Limitations were imposed upon the denominations of paper currency, with a view to converting silver certificates into denominations below $10, and the greenbacks into notes for $10 and higher denominations, leaving the minimum denominations of gold certificates, as under previous law, at $20. [1]

[1] The great demand for small notes arising in the period of business expansion which culminated in 1907 led to a modification of these provisions, by which the minimum denomination of gold certificates was reduced to $10 and authority was given to the Secretary of the Treasury, whenever he deemed the supply of small silver certificates insufficient, to issue United States notes of the denominations of $1, $2, and $5 in substitution for larger denominations to be cancelled.—Act of March 4, 1907, Sec. 2.

Some important changes were made in the banking law, but they were not of the character desired by the Indianapolis Commission. They tended rather to perpetuate and encourage the existing system of bond-secured circulation by providing for converting all the old types of bonds, except the four per cents. of 1925, into a new issue running for thirty years and paying only two per cent. The effect of this provision was to increase the circulation obtainable upon a given investment in bonds, because a larger amount in two per cents. could be obtained than in bonds selling at a higher premium. Another provision directed to the same end was that the tax on notes secured by two per cent. bonds should be one-half of one per cent. per annum, instead of one per cent. Still another step designed to perpetuate the bond secured circulation by making it more attractive to the banks was to allow notes to be issued to the par value of the bonds deposited instead of to only ninety per cent. of par.

Under the stimulus of these provisions of law a new direction was given to the movement of the national bank-note circulation. It had shown a declining tendency prior to 1892, which was checked to only a moderate degree in the next few years by the demand for currency and by the issue of several new classes of bonds. The bank-note circulation stood on March 1, 1900, shortly before the passage of the new law, at $249,516,227. With the advantages afforded by the two per cent. bonds, the reduction in taxation, and the privilege of issuing to par, circulation increased by about $90,000,000 before the close of the year 1900. The increase was less rapid for a time, but again attained momentum in 1903, and went on almost without interruption, until the reaction in the spring of 1908 from the panic of 1907. Old bonds were exchanged rapidly for the new two per cents. and there was a steady tendency on the part of national banks to draw bonds from the hands of private investors because of the small return paid upon them.[1]

[1] The interest-bearing debt outstanding on October 31, 1907, was $858,685,510, and of this amount $676,250,150 was in two per cent. bonds. Of the latter $549,788,930 was deposited with the Treasury

Another important feature of the act of 1900, which contributed in some degree to increase the new circulation, but still more to increase the number of national banks, was the reduction of the minimum capital required to create a national bank from $50,000 to $25,000. Many state banking institutions availed themselves of this provision to enter the national system. From March 14, 1900, to October 31, 1907, the number of banks admitted to the national system with a capital of less than $50,000 was 2389, with total capital issues of $62,312,500; but of these only 1365 were primary organizations, with total capital of $35,105,500, the remainder being conversions and reorganizations of state and private banks.[1]

The increase in circulation was stimulated to some extent by the issue of three per cent. bonds in 1898 to the amount of $198,792,660 to meet the expenses of war with Spain; but these issues had been out only about a year and a half when the act of March 14, 1900, permitted their conversion into two per cents. By an act of June 28, 1902, Congress authorized the issue of $130,000,000 two per cent. bonds for the construction of the Panama Canal, and of these $30,000,000 was issued in July 1906, and $24,088,040 in December, 1907. These increases in the public debt were offset by the redemption of maturing four per cent. bonds in 1907 to the amount of about $61,000,000; but the fact that the bulk of the debt was now in the form of two per cent. obligations made the banks the chief holders of the bonds and promoted the upward movement of note circulation. The influence of all these factors—increase in the debt, conversion of old debt into two

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to secure note circulation and $78,424,350 to secure deposits of public money in the banks.—Annual Report of the Comptroller for 1907, 17.

[1] Annual Report of the Comptroller of the Currency for 1907, 30. Incorporations with capital less than $50,000 rose by July 31, 1908, to 2557, with total capital of $66,610,500. A classification made May 14, 1908, when the number of these incorporations was 2508, with capital of $65,360,500, showed the number of banks in operation with capital below $50,000 to be only 2137, with aggregate capital of $57,613,164. The difference was due largely to increases of capital by small banks.

per cent. bonds, more favorable conditions for issuing circulation, and facility for creating small banks—may be traced in the following table of national banking progress from 1896:

NATIONAL BANKING PROGRESS, 1896–1913.

Oct. 31.	No. Banks.	Capital.	Circulation.	Two per cent. bonds to secure circulation.
1896	3,679	$658,304,915	$234,984,444	.....
1897	3,617	638,015,295	230,131,005	.....
1898	3,598	624,552,195	239,629,136	.....
1899	3,601	608,528,045	243,066,624	....
1900	3,935	632,502,395	331,693,412	$270,006,600
1901	4,279	663,224,195	359,911,683	316,625,550
1902	4,678	713,435,695	380,476,334	320,738,000
1903	5,147	766,367,095	419,610,683	376,003,300
1904	5,495	781,126,335	457,281,500	416,972,750
1905	5,858	812,026,075	524,508,249	483,181,900
1906	6,225	845,939,775	583,171,985	506,652,730
1907	6,650	909,274,775	609,980,460	549,788,930
1908	6,873	930,365,275	665,844,987	593,259,380
1909	7,025	964,621,925	703,940,557	573,328,450
1910	7,218	1,015,897,135	724,874,308	580,145,400
1911	7,331	1,032,632,135	739,165,313	593,006,600
1912	7,428	1,053,670,435	749,348,859	601,762,600
1913	7,514	1,068,534,175	758,899,709	604,264,950

The total assets of the national banking system rose on January 13, 1914, to $11,296,355,138, of which loans and discounts constituted $6,175,404,961; security holdings, $1,020,494,711; specie, $780,490,209; legal-tender notes, $201,429,211; bonds of all classes to secure circulation, $736,600,910. Individual deposits were $6,072,064,752; and circulation was $725,326,161.

While the Gold Standard Act of 1900 marked an important stage in the financial progress of the United States, it did not meet the desires of the Indianapolis Convention nor of financial experts generally in giving elasticity to the bank-note circulation. The great prosperity of the country, however, for the next few years, and the increase in the monetary circulation by the influx of gold, detracted somewhat

from the interest felt by business men in securing a change of law. The estimated gold stock, which was only $597,927,254 at the close of 1895, reached $1,419,943,124 at the close of 1905, and the amount of gold in the Treasury increased during the same period from $113,198,707 to $765,775,099. This was held largely against gold certificates in circulation, which increased from $50,099,889 on December 31, 1895, to $527,493,869 on December 31, 1905, and subsequently to $767,005,869 on December 31, 1907. Pressure continued to be felt every autumn in the movement of the crops, but was relieved for several years by measures of somewhat doubtful legality or policy adopted by Mr. Shaw, who was Secretary of the Treasury from 1902 to March, 1907. Among the measures which had frequently been resorted to on previous occasions was the deposit of public money in national banks. Mr. Shaw increased the number of such depositaries from 468 on February 1, 1902, to 1106 on November 1, 1906, and increased deposits during the same period from $106,629,952 to $148,975,346.[1]

The novel features of Secretary Shaw's policies were the acceptance of bonds other than United States bonds as security for deposits of public money; exemption of the banks from maintaining against public money the legal reserves required against other deposits; the transfer to the banks of public money which had already been received into the Treasury; deposits of public money with banks in anticipation of gold imports; and frequent modifications of his rulings so as to modify the volume of bank circulation and of public deposits as he deemed best. Several of these measures, especially the first and second, were severely criticised upon legal grounds, and the Secretary himself justified them upon the ground that in 1902, "but for what was then done, a

[1] Finance Report, 1906, 36. The number of such depositaries was further increased by Secretary Cortelyou in 1907 to 1421, but this was under a mandate of the act of March 4, 1907, "That the Secretary of the Treasury shall distribute the deposits herein provided for, as far as practicable, equitably between the different States and sections."

panic would have ensued rivalling in severity any in our history." [1] The New York Clearing House banks refused to accept immunity from reserve requirements, and the policy of deposit of public money in the banks against engagements of gold for import, which was first adopted in 1906, was deliberately abandoned by Secretary Cortelyou in 1907.[2]

All these difficulties in the administration of existing law afforded accumulating proof of the necessity for radical changes in the American monetary system. Surplus reserves in the New York banks, which were impaired but once from the panic of 1893 to the autumn of 1902, fell below the legal requirement in September of that year, and again twice in 1905 and four times in 1906.[3] When finally, in the autumn of 1905, rates for call money in New York rose on one occasion as high as 125 per cent., the deficiencies of the existing system were again brought into such prominent relief that it was generally felt that the time had come for action. Mr. Jacob H. Schiff, a well-known international banker, took the lead in endeavoring to secure new legislation by the presentation of a resolution to the New York Chamber of Commerce, which was adopted in December, 1905, providing for the appointment of a special committee of the Chamber to frame a currency measure. This committee, after consulting with the heads of leading foreign banks, made a report which was adopted by the Chamber of Commerce, November 1, 1906.

The creation of a central bank of issue was recommended by the Chamber of Commerce committee. It was proposed

[1] Finance Report, 1906, 37.

[2] In his response to the Senate in regard to his policy during the panic, Mr. Cortelyou said, "The Secretary did not feel called upon at any stage of the crisis to interfere directly with the normal movement of gold between international markets." Sen. Doc. 208, 60th Congress, 1st Session, 13. Andrew declares that the policy adopted by Mr. Shaw "was an objectionable interference with the free movement of gold reminiscent of mercantilist measures of the seventeenth century."—"The Treasury and the Banks under Secretary Shaw," in *Quarterly Journal of Economics*, August, 1907, XXI., 547.

[3] Andrew, *idem.*, 561.

that such a bank should be under the direct control of a Board of Governors appointed, at least in part, by the President of the United States and that it should perform some of the functions imposed under existing law upon the United States Treasury. The argument for such an institution was summed up as follows: [1]

> The operations of central banks in Europe, especially in France, Germany, Austria-Hungary, and the Netherlands, make it impossible to doubt that the existence of such a bank in this country would be of incalculable benefit to our financial and business interests. Such a bank in times of stress or emergency would be able by regulation of its note issues to prevent those sudden and great fluctuations in rates of interest which have in the past proved so disastrous. Furthermore, it would have the power to curb dangerous tendencies to speculation and undue expansion, for by the control of its rate of interest and of its issues of notes it would be able to exert great influence upon the money market and upon public opinion. Such power is not now possessed by any institution in the United States. Under our present system of independent banks, there is no centralization of financial responsibility, so that in times of dangerous overexpansion no united effort can be made to impose a check which will prevent reaction and depression. This is what a large central bank would be in a position to do most effectively. A central note-issuing bank would supply an elastic currency varying automatically with the needs of the country. This currency could never be in excess, for notes not needed by the country would be presented for deposit or redemption.

In view, however, of the political hostility supposed to exist against a central bank, an alternative plan was suggested for giving greater flexibility to the circulation of the national banks. It was proposed that any bank having fifty per cent. of its capital invested in United States bonds, against which it had circulation, could issue additional circulation in certain fixed proportions to capital, subject to a graduated rate of taxation. In the case of a bank with a capital of $100,000, the circulation authorized under the plan proposed would be as follows:

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[1] The Currency: Report of the Special Committee of the Chamber of Commerce of the State of New York, 9.

$50,000 in notes secured by bonds, taxed one-half of 1 per cent.
$5,000 upon general assets, taxed 2 per cent.
$5,000 upon general assets, taxed 3 per cent.
$5,000 upon general assets, taxed 4 per cent.
$10,000 upon general assets, taxed 5 per cent.
$10,000 upon general assets, taxed 6 per cent.

The maximum circulation authorized under this plan was estimated at the time of the report at $289,000,000, but this was based upon the ability of each bank to issue the full amount and upon limitation of the bond circulation in each case to fifty per cent. of capital, since the provision of existing law was retained, that total circulation should not in any case exceed capital. [1]

It was proposed that all the notes issued by a bank should be of the same form and that future issues of United States bonds should not be made available as a basis for the issue of bank-notes. The proposed issue was to be protected in a manner similar to that proposed by the Indianapolis plan—the creation of a guaranty fund from the proceeds of taxation. It was also proposed that, in order to secure the prompt redemption of notes, when no longer required in the channels of trade, redemption agencies should be established at sub-treasuries and other convenient points.

The adoption of the report by the Chamber of Commerce was preceded by a few days by action at the annual convention of the American Bankers' Association at St. Louis. This convention adopted a resolution authorizing a committee of fifteen members to frame a currency measure and to consult with representatives of the committee of the Chamber of Commerce. A smaller committee, headed by Mr. John L.

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[1] The maximum taxed up to four per cent. would be, under the Chamber of Commerce plan, only about $124,000,000. The amounts authorized under the bankers' plan, presently referred to, were about $206,500,000 under a tax of two and a half per cent., and $103,250,000 taxed five per cent. *Vide* article by the present writer, "The Plans for Currency Reform," in *New York Bankers' Magazine* (December, 1906), LXXIII., 897, *seq.*

Hamilton, president of the Bankers' Association during 1906, had prepared a plan, which was presented to the convention, but it was deemed best to secure harmony by consultation among those interested in different plans, and all of the members of the Hamilton committee were included in the membership of the enlarged committee of fifteen.

This committee met promptly in Washington in November, 1906, with the Hon. A. Barton Hepburn, president of the Chase National Bank of New York, as chairman. A plan was prepared which did not differ in principle from the plan of the New York Chamber of Commerce, but changed the basis of circulation so that a national bank might issue an amount of notes without bond security to the amount of forty per cent. of its bond-secured circulation, but not exceeding twenty-five per cent. of its capital. These notes were to be taxed at the rate of two and a half per cent. per annum. An additional issue was provided for, in order to meet more acute emergencies, to the amount of twelve and a half per cent. of capital, subject to tax at the rate of five per cent. This measure was introduced into Congress and was made the basis of a bill reported favorably by the Hon. Charles N. Fowler, chairman of the House Committee on Banking, who had long taken a leading part in the agitation for an improved currency system. This bill did not receive consideration, however, during the session which ended on March 4, 1907. At the annual convention of the Bankers' Association held at Atlantic City in September, 1907, the report of this committee was indorsed by a large majority and the committee was continued, with power to adopt such measures to secure legislation as it might approve.

Inevitably the serious conditions of the crisis of 1907 intensified the demand for reform. The demonstrated defects of the system of banking isolation led to more serious consideration than for many years of the project of a central bank. Such an institution was recommended by Mr. Ridgely, the Comptroller of the Currency, in his annual report to Congress, and received endorsement in other influ-

ential quarters. Party leaders did not believe, however, that public opinion was yet ripe for such a measure. In the Senate the Finance Committee reported favorably a bill introduced by Senator Aldrich of Rhode Island, extending the system of a bond-secured note issue. This bill, as reported, proposed to allow issues to a maximum amount of $500,000,000, secured by the deposit in the Treasury of State, municipal and railway bonds conforming to certain requirements.[1] Such issues were to be taxed, however, at the rate of six per cent., which provision, in view of reserve requirements, would make them unprofitable unless interest rates went above eight per cent.

In the House a measure of a very different character was introduced by the Hon. Charles N. Fowler, Chairman of the Committee on Banking, and was ordered favorably reported, with some amendments, on February 28, 1908. This measure provided for issues of notes on the general credit of national banks to the amount of their capital and the retirement of notes issued under the bond-secured system; but, in order to afford adequate assurance of safety, banks were required to contribute five per cent. of both note issues and deposits to a guaranty fund, which was to ensure the prompt payment of the deposits as well as the notes of a failed bank. Notes issued under the measure were to be taxed at the rate of two per cent. per annum, and were to be made responsive to the changing demands of business by the creation of twenty redemption districts. A motive for careful scrutiny of each bank by the others in a redemption district was created by imposing one quarter of the losses, in case of failure, upon the banks of the redemption district, before recourse to the guaranty fund; a means of making such scrutiny effective was afforded by the creation of committees elected by the bankers themselves in each redemption district with full power of visitation and examination. The

[1] The authority to issue notes on railway bonds was abandoned as a part of the bill by an announcement made by Senator Aldrich on March 17, 1908.

two per cent. bonds were to be purchased for the guaranty fund, in order to leave the field clear for the issue of securities at a rate of interest better adapted to keep them at par in the open market in case of war or other emergency. Provision was also made for the gradual retirement of United States notes from the surplus earnings of the guaranty fund.

The bill of Senator Aldrich passed the Senate late in March, but found so little favor with the House Committee on Banking, to which it was referred, that it was not reported back to the House. Republican leaders in that body felt that some measure should be passed which would afford a safeguard against another suspension of currency payments in time of stress by providing for a simple form of emergency circulation. So strong, however, was the opposition among commercial bodies to the perpetuation of the system of basing note issues upon long-term obligations, instead of upon the current business of the country, that a bill was introduced in the House by Representative Vreeland of New York seeking to meet this objection in part. This bill provided for the creation of associations in clearing house districts, of which the member banks were to have the privilege of issuing notes upon commercial paper deposited with a committee of the association.

The Vreeland bill was preferred by many members to the Fowler bill because it did not involve a radical departure from the existing system. It was agreed upon by a Republican conference, after various amendments, on May 11, 1908, by a vote of 128 to 16, and on May 14th passed the House by a vote of 184 to 145. All the Democrats voting and fifteen Republicans made up the minority.[1] The Senate on the next day substituted a modified draft of the Aldrich bill and asked a conference. It was impossible at first to secure agreement, but the necessity was so strongly felt of adopting some measure which would leave the impression upon the country that safeguards had been taken against another suspension of currency payments, that a substitute bill was finally presented only two weeks before the close of the

[1] *New York Journal of Commerce*, May 15, 1908.

session of Congress and was quickly passed through both houses.[1]

The new measure, which became law May 30, 1908, was known as the Aldrich–Vreeland law, and was made avowedly temporary in character by the provision that it should continue in force only until June 30, 1914. It authorized issues of new bank-notes to an amount not exceeding $500,000,000, which were to be made homogeneous in appearance and character with the old notes by making the wording on all read that they were "secured by United States bonds or other securities." Notes were to be issued to banks in any one State in the proportion that national bank capital and surplus in the State bore to the total of such capital and surplus in the country, but this provision was subject to exceptions. Notes authorized by the new law could be issued only to national banks having a surplus of twenty per cent. and having already notes in circulation under the old law to the amount of forty per cent. of their capital; and the total amount of notes issued under both the old and new laws was limited to the combined capital and surplus of the issuing bank.

Two separate methods were provided for obtaining the new circulation. The essential feature of the original Aldrich bill was preserved, that circulation might be issued upon direct application to the Comptroller of the Currency, "secured by the deposit of bonds other than bonds of the United States." This provision was limited to State and municipal bonds, and the amount which might be issued was restricted to ninety per cent. of the market value of the bonds. The other method of obtaining new circulation attracted the greater degree of attention, because it was a new departure in American currency legislation and was a short step in the direction of basing note issues upon commercial assets. Under this provision national banks were permitted to form

[1] Although the new measure was resolutely opposed by Mr. Fowler and other advocates of a credit currency, the conference report was accepted in the House May 27th by a vote of 166 to 140, and in the Senate on May 30th by 43 to 22.

national currency associations, which were to pass upon the applications of their members for notes and to support each other by a mutual guarantee. The security for the notes in such cases might be "any securities, including commercial paper," but notes could not be based on commercial paper to a greater extent than thirty per cent. of the capital and surplus of the issuing bank.[1] The term, "any securities," left the door open for the acceptance of railroad bonds or any other bonds, stocks, or notes which might be approved by the officers of the currency association and the government. The issue of notes under these provisions was limited to seventy-five per cent. of cash value in the case of commercial paper, but was not limited to the par value of the securities, as in the case of the notes issued directly by the Treasury.

That these issues of notes should have a purely emergency character was sought by the provisions regarding taxation. Issues under the law were to be taxed at the rate of five per cent. per annum, but as the redemption fund deposited in Washington was required to be ten per cent., the issue of notes could not afford a profit unless loaned considerably above the rate of five and a half per cent. Moreover, the rate of five per cent. was increased after the notes had been in circulation one month by an additional one per cent. a month, until after six months the rate was ten per cent.[1]

The new law contained a provision for the appointment of a National Monetary Commission to report "what changes are necessary or desirable in the monetary system of the United States." This commission was made up of nine senators and nine representatives, with Senator Aldrich and Representative Vreeland as chairmen for their respective chambers. This body made a thorough examination of foreign banking systems, subcommittees held conferences with leading bankers at the financial centres of Europe, and mono-

[1] The provisions of this act were extended to June 30, 1915, by the Federal Reserve Act of December 23, 1913, and the rate of taxation on notes, which was reduced by that act, was further modified and other changes were made, by the act of August 4, 1914, as described in Chapter XXVII., *infra*.

graphs were prepared for the commission by economists and specialists on the banking systems of nearly every commercial country. A greater degree of centralization in the function of note issue and in the custody of the gold reserves of the country were the distinguishing characteristics of the plan which was submitted by the commission to Congress in January, 1912.[1]

This measure provided for a central institution to be known as the National Reserve Association of the United States, which was to issue all future bank-note circulation. The association was to be constituted with an authorized capital equal to twenty per cent. of the capital of subscribing banks, of which one-half was to be paid in and the remainder to be subject to call. State banks and trust companies conforming to certain provisions and all national banks were entitled to subscribe to the stock and to become members of the association. The subscribing banks were to be grouped into fifteen local associations, in the territory of each of which was to be located a branch of the National Reserve Association. The principal functions of the local association were to exercise supervision over subscribing banks and to see that paper offered for rediscount conformed to the law and was adequately secured. The directors of the National Reserve Association and of the district branches were to be elected, to the number of thirty-nine, in such a manner as to give recognition to the small banks and to business and commerce apart from banking interests. The governor of the bank was to be selected by the President of the United States, and was to be one of seven *ex-officio* members of the Board of Directors, the others being two deputy-governors of the association, chosen by the directors, and four public officials,—the Secretary of the Treasury, the Secretary of Agriculture, the Secretary of Commerce, and the Comptroller of the Currency. The terms of the directors chosen by the banks were to be for three years, one-third retiring each year.

[1] Report of National Monetary Commission, January 9, 1912, Senate Document 243, 62d Congress, 2d Session.

The bank-notes authorized by the measure were to be based upon the general assets of the Reserve Association, subject to certain reserve requirements, and were to be a first lien upon such assets. The amount issued up to $900,000,000, including notes substituted for national bank-notes already outstanding, was to be free from special tax; but issues above $900,000,000 were to pay a tax at the rate of one and a half per cent. and above $1,200,000,000 at the rate of five per cent.; but amounts fully covered by gold or lawful money were to be free of tax.

The Reserve Association was required to maintain a reserve of not less than fifty per cent. against its demand liabilities, both on account of deposits and notes, including new issues of notes as well as those issued in place of outstanding national bank-notes. It was provided that when the reserve against liabilities should fall below fifty per cent., a graduated tax should be paid, at the rate of one and a half per cent. per annum for each two and a half per cent. of the deficiency, and that when the reserve fell below thirty-three and a third per cent., no further issues of notes should be made.

The bonds held by national banks to secure circulation were to be taken off their hands at not less than par and accrued interest by the National Reserve Association, which was given the right to issue notes to the amount of bank-notes which had been based upon the bonds. The Secretary of the Treasury was authorized to exchange the two per cent. bonds thus purchased for three per cent. bonds, running for fifty years, which were to be held by the Reserve Association, with the right after five years, with the approval of the Secretary of the Treasury, to sell not more than $50,000,000 per year. The government was protected from loss which might have resulted from the increased interest charges on the bonds by the levy of an annual franchise tax equal to one and a half per cent. of the amount of old bonds converted into three per cent. bonds.

Existing national banks were permitted to keep balances with the National Reserve Association and to count them and the notes of the Association as a part of their reserves.

It was not made obligatory upon these banks, however, to transfer their reserves from former reserve banks to the National Reserve Association. They were given the privilege of presenting commercial paper for rediscount to the Reserve Association, when such paper consisted of notes and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes. Notes or bills issued or drawn for the purpose of carrying stocks, bonds, or other investment securities were excluded from the classes of paper which could be rediscounted by the Reserve Association.[1] Paper of this character having not more than twenty-eight days to run could be discounted by the Reserve Association for individual banks; but if having a longer term to run could be rediscounted only with the guarantee of the local association. The Reserve Association was authorized, in case of serious emergency, to discount the direct obligations of individual banks having the guaranty of the local association and secured by a pledge of collateral. The Reserve Association was given authority to fix rates of discount from time to time, such rates to be uniform throughout the United States; to purchase and borrow gold; to deal in foreign bills of exchange, and to purchase acceptances from member banks.

While the report of the National Monetary Commission was not destined to be formally taken up by Congress, it was the forerunner of an even more radical departure from old banking methods, to be adopted within less than two years; and the principle that the old system of bond-secured notes must give way to a more scientific currency was given official recognition, even before the report of the commission was made to Congress, in the act of March 2, 1911, which provided that future issues of Panama Canal bonds should not be available as security for the issue of bank-notes.

[1] Similar definitions of the classes of business permitted were embodied in the Federal Reserve Act of December 23, 1913, Sec. 13.

CHAPTER XVI.

THE CANADIAN BANKING SYSTEM.

Its Origin and Growth—Foundation of the Bank of Montreal—The Union of the Canadian Provinces and the Dominion—Banking Reforms in 1870, 1880, and 1890—The Effect upon the Security of Note Issues and the Small Losses by Failure—Recent Suspensions—The Reforms of 1900 and 1908.

THE Canadian banking laws now in force represent an almost steady growth from comparatively crude conditions to a perfected scientific system. Founded originally upon Scotch models, the Canadian banks enjoyed at first the freedom from even the police supervision of the government which naturally arose from the fact that they framed their own charters. Canadian banking was not exempt from the risks and difficulties of the other institutions of a new and growing country, and defects in the security of the note issues and the protection of deposits were gradually remedied as they were disclosed by experience. The development of the Canadian system, however, has been natural and symmetrical and most of the changes in the law have had the approval of the leading bankers. Attempts have been several times made to substitute a government currency or a specially secured circulation for the elastic medium provided by the banks, but these attempts have not been sufficiently successful to destroy the essential advantages of the Canadian banking system. They have resulted in putting a considerable volume of government paper alongside the bank-note currency and in requiring a certain percentage of this paper to be held by the banks in

their cash reserves, but they have not supplanted the bank-note currency and are not likely to be permitted to, unless the necessities of the government in time of war should become paramount to the commercial interests of the country.

The history of Canada is that of several separate provinces before the union in 1841. The movement for better banking facilities began independently, but almost simultaneously in each province early in the present century. The scarcity of specie or of any other circulating medium in Lower Canada was partially supplied by the "Army bills" issued by the government during the war with the United States and it was not until 1817 that a banking company was formed.[1] Previous attempts to found a bank had been addressed to the local legislature of Lower Canada, but on June 23, 1817, a meeting was held at Montreal at which an association was formed with a capital stock of £250,000. An office was opened in August under the title of the Bank of Montreal, without waiting for legal authority, and what afterwards became the strongest institution of the Dominion was thus established. The bank was simply a private partnership, with unlimited liability of the shareholders, and continued so until the passage of a charter by the legislature on March 17, 1821, which was approved by the royal government and proclaimed on July 22, 1822.

Charters for the Quebec Bank and the Bank of Canada, situated at Montreal, were passed at the same session of the legislature and their approval by royal authority was proclaimed on November 30, 1822. The Quebec Bank had been organized in a similar manner to the Bank of Montreal on July 9, 1818, with a capital of £75,000, and the Bank of Canada had been organized on August 25, 1818, with a capital of £200,000. The charter of the Bank of Montreal, whose provisions were followed in the charters of the other two banks, gave the institution corporate powers until June

[1] The Army bills outstanding at the close of the war in March, 1815, were £1,249,996, but they were receivable for public dues and convertible into government bills of exchange on London, and were reduced by May, 1816, to £200,000.

1, 1831, and provided for the choice of thirteen directors, who must be British subjects and holders of at least four shares each. The principle of limited liability was applied to the shareholders, without any obligation beyond the amount of their subscription to the stock, but the directors were to be liable to the stockholders as well as to the holders of bank-notes in case the debts of the corporation should exceed treble the amount of the capital stock actually paid in, exclusive of the deposits. The bank was prohibited from lending on land or mortgage, but might take such property for debt contracted in the course of its legitimate dealings.

The fact that the acts passed by the provincial legislature for the incorporation of these banks were based upon the articles of agreement drawn by the incorporators made the restrictions trifling which were imposed upon the banks. There was no limit upon the volume of note issues except the general liability of the directors for the aggregate indebtedness. There was no prohibition upon loans upon the stock of the bank or upon loans to directors. The fact, however, that each bank was established by a special law afforded some measure of protection against indiscriminate private banking and there was a disposition from the outset to adhere closely to Scotch methods.[1] An indication of this is given by the prompt establishment of branches by the Bank of Montreal at Quebec and by both the Bank of Montreal and the Bank of Canada at Kingston in the upper province. The banks received the notes of their competitors and exchanged them and settled the balances in specie as often as once a week, according to the Scotch system. The Bank of Montreal employed an agent in New York for the negotiation of sterling exchange and all the Canadian banks of importance eventually had an agent or correspondent in the American metropolis.

[1] Mr. R. M. Breckenridge, in his admirable work, *The Canadian Banking System*, published by the American Economic Association, from which many of these facts regarding early Canadian banking are taken, states that among 140 odd charter members of the Bank of Montreal there were at least 90 Scotch names.

The importance of freedom of note issues in developing banking in a new country is indicated by the early returns of the Canadian banks, in spite of the considerable deposits which they were able to obtain. The total deposits of the three banks of the lower province in 1824 were £135,426, while the circulation was £167,498; the deposits in 1825 were £151,637 and the notes in circulation £177,454; the deposits in 1826 were £176,475 and the notes £193,548. The debts due to the banks, which may be assumed to represent chiefly the discounts, were £529,363 in 1824, £585,265 in 1825, and £594,515 in 1826. The debts due the Montreal Bank in the latter year were £371,334; Quebec Bank, £111,523; and Bank of Canada, £111,658. The banks secured the renewal of their charters in 1830 and 1831, until June 1, 1837. The legislation of this time cut off possible note issues by private bankers, by prohibiting notes payable to bearer except when issued by banks incorporated by law in Lower Canada. The total amount of notes in circulation for less than $5 was limited to one-fifth the capital stock of the Bank of Montreal and notes for less than five shillings were prohibited. Similar limitations were imposed upon the Quebec Bank and the power was reserved to the legislature to prohibit or limit entirely the circulation of notes under $5.

The Bank of Canada found its business falling off in 1825 and after gradually reducing its capital stock went into liquidation in 1831, upon the lapse of the charter. The bank did not fail or suspend payments, but adopted a policy of paying uncurrent and underweight coin, which led the Bank of Montreal to refuse its checks and notes and caused the rapid reduction of deposits until it became unprofitable to continue business. A charter was granted to the City Bank of Montreal in 1831, upon the representation of leading merchants that the capital of the existing bank was "altogether inadequate to the circulation of the valuable articles of import and export which its geographic position naturally brings to it," and that the most effectual preventive of the evil of monopoly "is the admission of reasonable

competition, with its counteracting influence." Another Montreal bank began business in 1835 under the title of the *Banque du Peuple* (Bank of the People). The principal partners were Messrs. Viger, De Witt, and Co., who were fully liable for the debts of the bank, while shares were issued to persons having no share in the management and liable only for the amount of their stock, according to the French system of partnership *en commandite*.

The movement for a bank in Upper Canada, now constituting the Province of Ontario, assumed definite shape a trifle earlier than in Lower Canada, but the first charter passed by the provincial legislature did not receive the royal assent within the period provided by the charter to give it validity, so that it became necessary to pass a new charter in 1819. The royal government again delayed action, but the Bank of Upper Canada, situated at Kingston, was finally authorized by proclamation of the royal assent on April 21, 1821, more than a year before such assent was granted for the banks of Lower Canada. The capital of the bank was originally fixed at £200,000, but this was reduced in 1823 to £100,000. The general provisions of the charter were similar to those of the banks of Lower Canada, but notes under five shillings were forbidden from the outset and the charter was to remain in force until June 1, 1848. The government subscribed for 2,000 shares of the capital at a par value of £25,000. A practical monopoly of note issues was conferred upon the bank in 1823 by an act prohibiting banks from carrying on business in the province, which did not redeem their notes in specie within its limits. The development of Upper Canada was somewhat more rapid after the establishment of the bank than before, from a combination of causes, and the capital stock actually paid in increased from £10,640 in 1823 to the full limit of £100,000 in 1830. The debts due by the bank increased from £107,598 on December 15, 1826, to £260,557 on January 1, 1831, and the notes in circulation increased during the same interval from £87,339 to £187,039. The bank encountered only the rivalry of an institution purporting to be the Bank of Upper Canada under

a forfeited character, which soon collapsed, until the incorporation in 1832 of the Commercial Bank of the Midland district. The capital of the new bank was fixed at £100,000. The capital of the Bank of Upper Canada was increased by a like amount at the same session, and the utmost eagerness was shown to purchase the stock. The Commercial Bank within three years sought and obtained power to double its capital stock and an act was passed incorporating the Gore Bank at Hamilton with a capital of £100,000.

The first bank charter in New Brunswick received the royal assent as early as March 25, 1820. The institution was known as the Bank of New Brunswick and was located at St. John, with a capital of £50,000. The shareholders were liable only for the principal of their stock, and debts by the directors, either as principals or indorsers, were limited to one-third of the paid-up capital. The banks were forbidden by an Act of 1838 to issue notes of a less denomination than five shillings. The first bank of issue actually established in Nova Scotia was opened in 1825 at Halifax under the title of the Halifax Banking Company. The Bank of Nova Scotia, which was the first chartered bank, was incorporated by an Act approved March 30, 1832, with an authorized capital of £100,000. The bank was without a chartered competitor for five years and during its first ten years divided profits among the shareholders at the average rate of 8.9 per cent. and increased its capital to £140,000. The issue of bank-notes for less than £5 was prohibited in Nova Scotia in 1834.

The banking system of the Canadian provinces was thus established on a comparatively safe and scientific basis, similar to the Scotch system in the part played by the large incorporated banks and their branches, but without any serious control by law. The history of the next thirty years involves a mania for banking speculation similar to that witnessed in the United States, on the part of the Canadian people, and an effort to apply the rigid limits of the English restriction act on the part of the home government at London. The banking mania seized Upper Canada and resulted

in the creation of several joint stock banks between 1834 and 1837. The creation of such banks without a special charter was brought to a summary end by an Act of 1837, prohibiting the issue of circulating notes, except by banks holding legislative charters, and making such issues a misdemeanor. The banking phrenzy was not checked by this salutary regulation. The House of Assembly had passed a bill in 1833 to enable the Receiver General to issue notes chargeable on the public, and a select committee in 1835 reported in favor of a provincial bank, on the basis of loans guaranteed by the province. These measures alarmed the home government and resulted in a despatch to the Lieutenant Governor August 31, 1836, directing him not to permit any act touching the circulation of promissory notes or the law of legal tender to come into operation in Upper Canada without having first received the royal sanction. This precaution was taken none too early, for bills were passed during the session of 1836–37 increasing the banking capital of the province from £500,000 to £4,500,000 and conferring a power of note issue to the limit of £13,500,000.[1] The Imperial government did not formally disallow these acts, but returned them to the Colonial legislature for more sober consideration. This course was effective and none of the measures were re-enacted.

The union of Upper and Lower Canada was accomplished on February 5, 1841, under the title of the Province of Canada, and banking legislation was henceforth enacted in uniform terms for the entire province. The government of Upper Canada prepared for the union by the sale of the government stock in the Bank of Upper Canada and the separation of the government from official connection with the bank. A scheme was brought forward soon after the union by the Governor General, Lord Sydenham, for a provincial bank of issue under the direct authority of the government. Lord Sydenham was a personal friend of Lord Overstone, the great champion of "the currency principle" in England, and endeavored to engraft upon Canadian

[1] Breckenridge, 77.

finances the separation of the functions of note issue and banking which were imposed upon the Bank of England by the Act of 1844. Lord Sydenham suggested a series of resolutions for a bank, with no other powers than that of issue, with an authorized circulation of £1,000,000 and an excess issued only against coin or bullion. The authorized circulation was to be protected by government securities, of which the interest was to go to pay the expense of managing the bank and any balance to the public Treasury. There was a strong outburst of public feeling against destroying the profits and efficiency of the existing banks and the conservatives, French Canadians, and a few supporters of the party in power, united in committee of the whole on August 31, 1841, in a resolution "that it is inexpedient to take into further consideration during the present session the establishment of a provincial bank of issue, or the issue in any way of a paper currency on the faith of the province."[1]

The committee which considered Lord Sydenham's proposals admitted the propriety of some uniform regulation of the banks, and it had been repeatedly urged in circulars from the home government. These recommendations contemplated the usual safeguards against unsound banking,—limiting the business of the banks to a proper banking business, conducted after the subscription of the capital, and involving forfeiture if specie payments were suspended for sixty days. These restrictions were applied to the three banks of Lower Canada when they sought a renewal of their charters in 1841. Notes under five shillings were prohibited, and notes under one pound were not to exceed one-fifth of the paid-up capital. The various charters were to expire at the end of the first session of Parliament after June or December 1, 1862. Double liability was imposed upon shareholders, and nearly all the provisions for the public security which had prevailed in either Lower or Upper Canada were now applied to the banks of the entire province. The pet theory of the home government, that coin should take the place of small notes, in order to constitute a healthy monetary

[1] Breckenridge, 112.

system, led to considerable correspondence in 1846, pending the approval of a charter passed in that year, but the government finally consented to the retention of the $1 notes.

The mania for "free banking" on securities seized upon the Canadian people towards the middle of the century and resulted in the law of 1850, based upon New York models. William Hamilton Merritt was the author of the new law, and he first brushed away the obstacles by the repeal of the laws prohibiting the circulation of the notes of private bankers. Such note issues were permitted, provided that the banks formed for the purpose deposited Provincial securities with the Receiver-General for not less than $100,000 as a pledge for their notes. One of the objects of this legislation,—to broaden the market for Provincial securities,—was indicated by the provision that these notes were to be exempt from the tax of one per cent. per year imposed on the circulation of the chartered banks, and that the latter might surrender their circulation against their assets, and issue notes upon deposits of securities. The notes, in case of suspension, were to be paid from the proceeds of the securities, and any balance was to be applied, with the other assets, to the settlement of the remaining debts of the bank. The notes were to constitute a preferred claim against other assets in case the proceeds of the securities proved insufficient.

The effort to drive the chartered banks into the secured note system was carried further, in 1851, by a bill granting certain exemptions from taxation to banks which were willing to restrict their circulation to the maximum shown in their last statement and to reduce it in three years to three-fourths of the average for 1849 and 1850. Such banks were permitted to issue additional notes to the amount held in gold or silver coin or bullion, or in debentures issued by the Receiver-General and reckoned at par. They were not required to deposit the debentures, but were required in case of failure to apply them exclusively to the redemption of their notes. The fact that the banks were required to hold the debentures permanently, whether in the custody of the government or in their own vaults, resulted in withdrawing

active capital from commercial banking and offering insufficient inducement to investors of banking capital. Five banks were created under the law, of which two soon disappeared and three were continued under special charters. The Bank of British North America, which operated in all the provinces under a royal charter, apparently obtained the greatest advantages from the secured note system by employing it prudently in connection with its other business. The failure of the "Free Banking Act" was acknowledged as early as 1859, but it was not repealed until the passage of the Provincial Note Act of 1866.

The temptation to use the power of note issue for the benefit of the State assailed the provincial authorities again in 1866, when the government found themselves compelled to raise about $5,000,000 to discharge the floating debt. Mr. A. T. Galt, Minister of Finance, succeeded in carrying a bill, which received the royal assent August 15, 1866, assuming the power of the Province to issue not more than $8,000,000 of notes, payable on demand in specie at Montreal or Toronto and legal tender except at those offices. He did not dare propose the immediate abolition of the bank-note currency, but proposed an indemnity payment by the government of five per cent. per year, on the amount of notes outstanding on April 30, 1866, until the expiration of the charter of any bank which might accept the conditions of the act and withdraw its own circulation before January 1, 1868. Banks willing to accept this offer were relieved from the requirement to invest ten per cent. of their capital in debentures and allowed to exchange them at par for Provincial notes. The Bank of Montreal was the only institution which accepted the new system and gradually substituted Provincial notes for its own issue. This action separated the interests of the Bank of Montreal from those of the other banks and led the former to force the legal tender notes into circulation as rapidly as possible in the settlement of its balances. The Bank of Montreal was able to force the other banks into holding legal tenders by threatening to exact settlements in legal money, which the other banks

were thus compelled to set aside for the purpose. The result was a reduction of the banking resources of the other banks and the complication of the paper currency by the rival circulation of the Provincial notes in competition with bank-notes.

New Brunswick and Nova Scotia were brought within the circle of Canadian banking legislation by the Act of 1867, creating the Dominion of Canada, which conferred exclusive authority in matters connected with currency, coinage, and banking upon the Parliament of the Dominion. The charters of existing banks were extended temporarily to the end of the first session of Parliament after January 1, 1870, and several provisions affecting the Canadian banks were extended to those of New Brunswick and Nova Scotia. The Provincial note issue was consolidated into an issue of Dominion notes and redemption agencies were provided for in the capitals of the four provinces. The banks in existence when the Confederation became a fact on July 1, 1867, were eighteen in Ontario and Quebec, five in Nova Scotia, four in New Brunswick, and one operating in all the provinces under royal charter.

The attempts to create a secured circulation or a government currency were renewed after the creation of the Dominion, and the supporters of the former had the benefit of the example of the United States and the active efforts of Mr. E. H. King, the manager of the Bank of Montreal. A scheme of this sort was taken up by Mr. Rose, the new Minister of Finance, in 1869, and, according to his bill, was to go into effect on July 1, 1871. The banks after that date were to be required to reduce their unsecured circulation twenty per cent. a year until the whole should be retired, and were permitted to issue notes up to the amount of their capital stock actually paid in, bearing on their face the statement that they were secured by the deposit of Dominion securities. These notes were to be legal tender throughout the Dominion, except at the office of the issuing bank, so long as they were redeemed in specie, and were to be protected by a cash reserve amounting to twenty per cent. of the notes

and one-seventh of the deposits subject to call. The notes were to constitute the first charge upon the assets in case of insolvency. The opposition was so strong, and there were so many measures whose success was more important to the ministry, that Mr. Rose announced on June 15th the temporary withdrawal of the plan for the session. Sir Francis Hincks became Minister of Finance before the next session and he abandoned the policy of a specially secured circulation and contented himself with throwing some additional safeguards around the existing bank-note system.

The charters of the banks were extended by the Act of May 12, 1870, for a period of ten years, and the most important changes of the period were then made. The desire for a codification of the banking law led, however, to a more comprehensive act in 1871,[1] which embodied the reforms of 1870 with some minor changes and many amplifications of detail. The banks in 1870 surrendered the right to issue notes below the denomination of $4 and secured in compensation the abolition of the one per cent. tax and the repeal of the requirement to keep one-tenth of their capital in Dominion securities. The government assumed the issue of small notes and the banks were required to hold not less than one-third of their cash reserves in Dominion notes. The severe period of depression through which the Dominion passed between 1874 and 1879, and the several bank failures which occurred, led to further important changes in the banking law when the charters were about to expire in 1880. The bankers themselves came forward with the proposals for reform and were now willing to accept several propositions which they had before rejected. The minimum denomination of notes was changed to $5 and the banks were required to retire the notes for $4 as soon as practicable. The proportion of cash reserve to be held in Dominion notes was increased to forty per cent. The use of the title of "Bank" by a private firm not incorporated under the laws of the Dominion was made a misdemeanor, unless the words "Not

[1] Act of April 14, 1871, "relating to banks and banking," 34 Victoria, c. 5.

Incorporated" were added to the title. This provision was made to prevent the public from mistaking private bankers for those holding charters and was extended in 1890 so that any such expression as "Bank" or "Banking House" was made illegal, whether the words "Not Incorporated" were added or not.

The history of the Canadian banking system between 1880 and the renewal of the bank charters in 1890 was a comparatively uneventful one, but experience of the banking law had suggested a number of reforms which were carefully discussed before the renewal was voted. It was found that the notes of the banks did not remain steadily at par in those parts of the country far removed from the redemption agencies. It was also found that, notwithstanding the ample security for the final payment of the notes of failed banks, they sometimes dropped to a discount when the holders desired to realize upon them at once.[1] The importance of concerted action to secure the reforms desired by the public, without infringing upon the freedom of banking, was keenly felt by the leading banks and they held a meeting in Montreal on January 11, 1890, at which they resolved to request an interview with Mr. Foster, the Minister of Finance. The request was granted and interviews took place on January 25th and February 11th and 12th. Several differences of opinion developed regarding details, some of which were carried before the Privy Council, but a thorough revision of the banking law was enacted and received the royal assent on May 16, 1890.[2] The important features of the Canadian banking system, as it developed from the legis-

[1] "Although the liquidators were ready to redeem within a month, the discount on the notes of the Exchange Bank after its failure rose as high as five or ten per cent. Redemption of the notes of the Maritime Bank, though finally in full, was delayed for nearly three years after the failure, and in the meanwhile its issues sold for as low as forty cents on the dollar. In notes of the Central Bank of Canada, Americans near Sault Ste. Marie found a profitable speculation by buying them up after the failure, at ten per cent. discount."—Breckenridge, 315.

[2] 53 Victoria, c. 31, "An Act respecting banks and banking."

lation of 1870 and 1880 into that of 1890, may be discussed under the following headings:

1. Security of note issues.
2. Elasticity of circulation.
3. Uniformity of circulation, without discount upon the notes.
4. Inspection of accounts and security of general creditors.
5. Cash reserves and the use of coin.
6. Branch banks and the requirement of large capital.

1. The essential conditions which secure the note issues of the Canadian banks are the duplicate liability of shareholders, the first lien of note-holders upon the assets of a failed bank, the Bank Circulation Redemption Fund, and the five per cent. interest which accrues upon the notes of failed banks from the date of refusal to redeem to the date when readiness to redeem is again announced. The duplicate liability of shareholders dates back to 1834 in Ontario and 1841 in Quebec. The making of the notes a first lien on the assets was suggested by the bankers in 1869, but was abandoned because of the opposition of Mr. Hincks. He feared that the impairment of the equal claims of other creditors which this provision involved would lead to a run by depositors and to the injury of the banks. The failures between 1874 and 1879 compelled many note-holders to realize on their notes at a great discount, in order to obtain immediate use of their money,[1] and dissatisfaction was so great that the bankers again proposed in 1880 that the notes be made a first lien. The total assets of each bank were from six to ten times its note obligations and, if these assets were lost, the duplicate liability of the shareholders would still cover the outstanding notes. These resources constituted a security for the redemption of the notes which it was believed would prove complete, and which the bankers were willing to concede to the public for the privilege of retaining unimpaired their power of note issue.

The Act of 1890 confirmed the provisions of 1880 for making the notes a first lien on the assets, and added two

[1] Breckenridge, 289. Canadian bank-notes are not legal tender.

new provisions designed to keep the notes of a failed bank absolutely at par during the period of liquidation. The most important of these was the creation of a safety fund, to be called "The Bank Circulation Redemption Fund," which was to be raised by contributions from the banks, before July 16, 1892, to an amount equal to five per cent. of the average circulation of each contributing bank. The redemption fund is in the custody of the Minister of Finance and bears interest at the rate of three per cent. per annum. It is specifically set apart for the payment of the notes of failed banks. Redemptions are required to be made without regard to the amount which the failed bank may have paid into the redemption fund, but when the redemptions, with interest, exceed such payments, the Minister of Finance may call upon the other banks to make good to the fund the amount of such excess. These calls upon the other banks are limited to one per cent. annually of the amount of their circulation and the amounts thus paid by the banks are reimbursed to them when recovered from the failed bank.[1]

The redemption fund afforded a guarantee, if it was needed, that the notes of a failed bank would always be paid in full. A further provision was made that the notes of failed banks should bear interest at the rate of six per cent. per year from the day of suspension to the date named for their payment.[2] The practical operation of this provision has been eminently successful and has, in connection with the guarantee afforded by the safety fund, made the notes of a failed bank as valuable an investment up to the time of redemption as a six per cent. bond. The holders of such notes have had no difficulty in selling them at par to the other chartered banks, to brokers or to persons having a little

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[1] The omission of a limitation of this sort upon the liability of the banks for the general-safety fund was one of the causes of hostility to the banking plan of Secretary Carlisle, presented to the United States Congress in his annual report for 1894. It was feared that the indefinite character of the liability would excite alarm among depositors.

[2] Reduced to five per cent. in 1900.

money seeking temporary investment. The legal money of redemption under Canadian law is "specie," and the gold standard is maintained with but little gold in circulation. The banks, in making ordinary payments, were required by the law of 1880 to pay amounts up to $50, upon request of the payee, in Dominion notes. This limit was raised in the Act of 1890 to $100.

2. One of the important benefits inherent in the Canadian bank-note circulation is its elasticity. This is not due affirmatively to recent legislation, but is due to the successful resistance of Canadian bankers to government propositions for a specially secured currency.[1] The banks pay out the notes when business activity demands them and the notes drift back for deposit and the settlement of discounts when business activity slackens. The circulation thus varies in the course of the year by from fifteen to twenty per cent. The month of October is usually that of the maximum circulation and the month of January has been in recent years that of the minimum. The first month of the year is usually marked by a lull in business, which brings surplus notes to the banks for deposit. The revival of activity in the Spring calls out a few additional notes, but the circulation does not increase materially until the movement of the crops sets in in August. Then comes the steady expansion of note issues to meet demand, which persists until the middle of November. The following table shows for representative years the expansion of note issues in the Autumn and the return to normal conditions in the following year:

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[1] Even in 1890 the theory of a circulation based upon evidences of the public debt had considerable footing and was advocated by Sir Donald Smith, President of the Bank of Montreal. It seemed to be thought in Canada that such a system would benefit the larger banks at the expense of the weaker and some of the opposition to the creation of a safety fund was apparently based upon the fact that it would invest the notes of the weakest banks with the same credit as those of the strongest.—Breckenridge, 320. This argument was necessarily directed against convenience and uniformity.

Autumnal Variations in Circulation.

YEAR.	AUG. 31.	OCT. 31.	INCREASE IN OCTOBER.
1898	$37,299,000	$42,543,000	$ 5,244,000
1900	47,421,000	53,198,000	5,777,000
1902	55,035,000	65,928,000	10,893,000
1904	60,227,000	72,226,000	11,999,000
1905	62,495,000	76,888,000	14,393,000
1906	70,108,000	83,718,000	13,610,000
1907	76,563,000	84,290,000	7,727,000
1908	70,390,000	83,037,000	12,647,000

The banking experience of Canada in recent years is a sufficient vindication against the charge that a banking currency leads to inflation. The volume of notes usually in circulation exceeds by only a small ratio sixty per cent. of the aggregate capital stock of the banks, although they are allowed to issue to the full amount of their capital. Some of the banks have occasionally touched the maximum limit and the branches have been promptly notified by telegraph when the limit has been reached. A real demand for money from such banks is met by loans to them from banks which have not reached the limit. The contracts for these loans call for money, like other contracts, but it is understood that they shall be paid in the notes of the lending banks, so that the public get the benefit of the limit upon their combined issues.[1] If the Canadian system has been subject to legitimate criticism in recent years, it has been in the failure of banking capital to keep pace with the growth of the country; and the increase in demand for currency has been met in a large degree by the law of 1913, permitting issues on central gold reserves.

3. The necessity of providing more fully for maintaining the notes of all the banks at par in all parts of the Dominion, which was recognized in 1890, was due not so much to any question of the solvency of the banks as to the mechanical provisions for redemption. The convenience of note-holders had already been partially provided for by mu-

[1] Root, *Canadian Bank-Note Currency*, "Sound Currency," II., No. 2, p. 7.

tual arrangements between the banks for the redemption of each other's notes. It would have involved a manifest injustice, in view of the wide difference in character and strength of the Canadian banks to compel each to redeem the notes of all others against its will, but the banks were ready to accept a mandatory law requiring each bank to establish agencies for the redemption of its own notes at the commercial centre of each province. It was accordingly provided in the Act of 1890 (Section 55) :

> The bank shall make such arrangements as are necessary to ensure the circulation at par in any and every part of Canada, of all notes issued or reissued by it and intended for circulation ; and towards this purpose the bank shall establish agencies for the redemption and payment of its notes at the cities of Halifax, St. John, Charlottetown, Montreal, Toronto, Winnipeg, and Victoria, and at such other places as are, from time to time, designated by the Treasury Board.

4. The bank-note circulation of Canada, under the operation of the redemption fund and the complementary requirements, has, in the language of Mr. Breckenridge, "acquired a thoroughly national character ; since 1890 it has circulated from one end of the country to the other, never causing loss to the holder, yet keeping unimpaired the qualities for which, in its less perfect state, Canadians had again and again refused to give it up."[1] The fulfilment of these conditions, with the elasticity and sufficiency which usually accompany a banking currency, meet all the requirements of a perfect currency system. The protection of the note-holder against both temporary and permanent loss closes the case in favor of Canadian banks of issue. They may be well or ill managed as banks of discount and deposit, but, as such banks must exist under any currency system, their bad management cannot be made an argument against the power of note issue unless that power increases their power for evil as banks of discount and deposit. Questions, therefore, relating to the management of the Canadian banks in their discounting business, and the number of failures they may have suffered, should not be confused with the question

[1] *The Canadian Banking System*, 338.

of the success of their system of note issues in providing a sufficient, elastic, and secure currency.

Having made this distinction, it may be admitted that the Canadian banking system is capable of improvement in the direction of official supervision. While discount banking is essentially a private business, it is usually done by corporations holding special privileges by authority of the state, and the subdivision of modern industries justifies the citizen in asking that the state exercise the power of visitation and supervision over such corporations, when they deal intimately with the public, which he cannot conveniently exercise for himself. The weakest spot in the Scotch and Canadian banking systems has been the absence of this supervision, and, defective as government supervision often is, it would probably have prevented some of the great losses which have come to shareholders in those countries. The proposal of government supervision in Canada has been several times brought before Parliament, but has always been resisted upon the grounds that public auditors or inspectors could not ascertain accurately the real character of banking assets, and that the fact of government inspection would mislead the public into a confidence which might prove to be misplaced. The project of inspection was renewed by Mr. Foster in 1890, but the auditors whom he proposed were to be appointed by the shareholders at their annual meeting. The same objections which had been made on previous occasions were renewed and the project of a formal audit was again abandoned.

The larger Canadian banks are not, however, without a system of supervision of their own, which ought to be more efficient than that of government officers when there is no collusion between the inspector and general manager. Such collusion is not likely to be a frequent occurrence, because the chief inspector is required by his duties to be a man of independent judgment, of banking experience and reputation, and to receive a large salary. It is his duty to make tours of the branches, annually or oftener, for the purpose of examining the character of the discounts granted and the

general policy pursued. The mere verification of accounts is performed by subordinates. The chief inspector, therefore, is the equal in character and position of the general manager, and is exposed to few of the temptations of an inferior. He confers with the latter and reports the results of his inquiries regarding the standing of firms seeking discounts. If the inspector is associated too closely by family or other ties with the general manager, the fact is likely to become a subject of business gossip and to impair confidence in the bank. The establishment of the general redemption fund has had a salutary effect in attracting the attention of the banks to each other's condition, because of the common responsibility which the fund imposes.

The safeguards of the Canadian system have been such that the entire losses to creditors, exclusive of shareholders, since confederation in 1867, have been very limited in amount. Only rarely even has it been necessary to assess shareholders under their duplicate liability. "The record for the years preceding 1867," says Mr. Breckenridge, "is hardly less admirable, there being no failures in Nova Scotia or Lower Canada, while in New Brunswick the double liability of shareholders saved the banks' creditors, and in Upper Canada the failure of the Bank of Upper Canada was the only one which inflicted considerable loss."[1] The Bank of Upper Canada violated the rules of sound banking under the stimulus of a period of rapid growth in Ontario, and made heavy loans to lawyers, politicians, and the gentry. Much money was lost in the land speculations of 1857, the capital was reduced in 1861, the public deposits were reduced in 1863, another reduction of capital in 1866 failed to save the bank, and payment was stopped September 18, 1866, with liabilities of $3,402,000. The assets were nominally worth $5,362,000, but gradually shrunk until in 1882 they were only $420,387 against still outstanding liabilities of $1,380,015. Of this liability $1,122,649 was still due the government, which was open to the suspicion, by its tardy efforts to re-

[1] *The Canadian Banking System*, 355

cover, that it had abused its power to obtain advances from the bank during its period of prosperity.[1]

Six failures occurred in Canada between 1871 and 1881, six between 1883 and 1889, and eight between 1893 and 1908. The notes in every case since 1881 have been paid in full, but in some cases prior to 1890 they were redeemed after considerable delay and after falling to a discount. The capital of only four of these failed banks was larger than $500,000, and in three of these four cases the assets and deposit liabilities were assumed by other Canadian banks. The first of these larger failures was that of the Federal Bank of Canada, which increased its capital in 1883 to $3,000,000, but was compelled to reduce it in 1885 to $1,250,000 on account of losses from Michigan lumber transactions and loans in Manitoba. The other banks having offices in Toronto came to the assistance of the Federal Bank in January, 1888, and agreed to advance enough money to pay off its entire liabilities and assume the assets, if the bank would wind up its affairs.

The more important failures after 1890 were those of the Commercial Bank of Manitoba, the *Banque du Peuple* of Montreal, the Ontario Bank, and the Sovereign Bank of Canada. The Commercial Bank succeeded to the business of a private firm at Winnipeg in 1884 and assumed the heavy risks which are often run by banks in new countries. Its business was essentially local and its failure was not a surprise to other bankers in the Dominion. The other banks were critical as early as 1892 about accepting the drafts of the Commercial Bank on Montreal, and in May, 1893, a drain of deposits began. The bank paid out its notes for a time to nervous depositors and thus increased its circulation between May 31st and July 3d by the sum of $140,605, while the deposits were reduced $189,813.[2] The automatic

[1] Breckenridge, 175.

[2] The purpose of depositors in accepting their deposits in notes was to convert an ordinary claim into a preferred claim, but the process of conversion was necessarily limited by the limit of circulation allowed the bank, as well as by the certainty that the bank would quickly be unable to settle its balances with the other banks.

operation of the Canadian system of redemption came into play when these notes fell into the hands of other banks, and the Commercial Bank was compelled to suspend with liabilities of $1,344,269. The *Banque du Peuple* was compelled to reduce its capital in 1885 from $1,500,000 to $1,200,000, and suspended on July 16, 1895, with a circulation of about $787,000 and with total liabilities of about $7,500,000.

The *Banque du Peuple* closed its doors in the hope that arrangements might be concluded with its creditors which would enable it to resume business within the period of ninety days, for which continued suspension would, under the law, "constitute the bank insolvent and operate a forfeiture of its charter or act of incorporation, so far as regards all further banking operations."[1] The notes remained steadily at par and were redeemed before October 5th, except $150,000, for which the money was held in the bank. One of the plans proposed for reorganization was the issue of deposit receipts to depositors, payable in from six months to two years. The period of suspension passed, however, without resumption, and it appeared at the meeting of the shareholders on December 17, 1895, that overdrafts had been granted to five individuals and firms amounting to $1,229,000, and to four of the directors to the amount of $235,000. The depositors eventually received 75¼ per cent. of their claims.[2]

The failure of the Ontario Bank with a capital of $1,500,000, on October 13, 1906, was not due to unsoundness in the business of the bank, but to speculation by the general manager in the New York stock market.[3] Arrangements were made by which the Bank of Montreal assumed its assets and paid its liabilities to the public, several other banks agreeing to indemnify the Bank of Montreal in case of loss. The shareholders lost their entire investment, how-

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[1] Sec. 91.

[2] Breckenridge, in *Quarterly Journal of Economics*, August, 1900, XIV., 543.

[3] H. M. P. Eckardt, in *New York Bankers' Magazine*, February, 1907, LXXIV., 229.

ever, and were subjected to a considerable assessment.[1] The other large failure of the time was that of the Sovereign Bank, which had been founded with high hopes and a capital of $4,000,000, in April, 1902. So aggressive was the bank and such large profits did it show, down to the spring of 1906, that the Dresdner Bank of Berlin at that time acquired a three-eighths interest in its capital, and the event was hailed as opening a new era in international finance.[2]

But the Sovereign Bank ventured upon unsafe ground, it became necessary to write off the whole of the reserve fund of $1,250,000, and $1,000,000 of the capital in June, 1907, and a radical change was made by the foreign bankers in management and methods.[3] Even reorganization failed to save the institution and its doors were closed on January 18, 1908, with liabilities to the public of $16,174,408. As in the case of the Federal Bank and the Ontario Bank, other Canadian institutions found the assets of the failed bank good enough to warrant their assumption of its liabilities, and they were quietly taken over without a day's embarrassment to depositors or other creditors. The option was given to depositors of withdrawing their funds in cash or leaving them with the new depository.[4]

Of the four smaller banks which failed between 1893 and 1908, the first was the *Banque Ville Marie* in 1899, with capital and reserves of $489,620 and liabilities to the public of $1,766,841. The failure was essentially fraudulent and depositors received only seventeen per cent. of their claims. The second of these failures was that of the Bank of Yarmouth in 1905, with capital and reserves of $335,000 and liabilities to the public of $362,207. The *Banque de St. Jean* at St. John's, Quebec, was closed on

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[1] Letter of A. St. L. Trigge, Secretary of the Canadian Bank of Commerce, to the author, September 17, 1908. The assessment was then estimated at about fifty per cent.

[2] *New York Bankers' Magazine*, February, 1907, LXXIV., 229.

[3] *Ibid.*, August, 1907, LXXV., 248.

[4] *Ibid.*, February, 1908, LXXVI., 213.

April 29, 1908, with a capital and surplus of $326,386, and nominal assets of $970,847. The *Banque de St. Hyacinthe*, in the same neighborhood, was finally closed June 23, 1908, with capital and surplus of $406,235 and nominal assets of $1,576,443. The first of these two failures showed large elements of wrong-doing, but the second was less discreditable and depositors recovered a considerable proportion of their claims. The Bank of Montreal was prompt to open a branch in St. Hyacinthe, which offered accommodation to the sound customers of the failed institution.[1]

5. The requirement of a fixed minimum reserve of specie against liabilities was suggested by Mr. Hincks in 1869, but he was convinced by the unanimous opposition of the bankers that the requirement would prove more of an injury than a benefit to the business community in times of stringency. It was pointed out that a reserve which cannot be used is of no avail in emergencies; that if the proportion were low, it would be treated by weak banks as always sufficient; and that a part of a bank's best and most available funds often consisted of balances in New York and London, rather than specie in its own vaults. These arguments were conclusive with Mr. Hincks, but they failed to convince Mr. Foster when the plan of a minimum reserve was suggested to him in 1890. The experiment of a minimum reserve had then been longer in operation in the United States and was believed to have produced beneficial results. It was pointed out, however, that the small local banks of the United States occupied a very different position from the great chartered banks of Canada and that regulations which might be necessary in the one case might not be in the other. Mr. Foster's proposition was to require each bank to hold specie and Dominion notes to the amount of ten per cent. of its liabilities. The bankers carried the contest before the Privy Council and at a hearing given them on February 22, 1890, carried the majority with them and secured the exclusion of any provision for the reserve from the government bill.[2]

[1] *New York Bankers' Magazine*, August, 1908, LXXVII., 241.

[2] Breckenridge, 327.

One of the strongest arguments in favor of liquid reserves and banking upon general assets, without government interference, is found in the comparative calm which has reigned among Scottish and Canadian bankers when those of other countries have been shaken by panic. A serious test of this kind came in 1893, when Canada could not fail to be affected by the acute financial convulsion of her great neighbor, the United States. Several Canadian banks have their own offices in New York and the others have agents there as well as in London. These agencies do not seek business actively in New York and London, but buy and sell bills of exchange when they can do so to better advantage than the parent bank. They loan more or less on call, but only rarely on time. In periods of stringency they have several times come to the rescue of the New York money market, when the requirements of a rigid reserve law tied the hands of the American banks. Their most important service has been, however, to their parent banks when the pressure of an unusual demand has led the latter to draw upon their foreign balances. These balances in New York constituted one of the best liquid assets of the Canadian banks in 1893 and were drawn down nearly $8,000,000. The banks sacrificed temporary high profits, raised their interest rates no higher than seven per cent., protected their regular customers, and while their neighbors across the border were foundering in the waves of a financial crisis, they rode the storm with a serenity which might have justified for them the heroic motto of William the Silent, *Sævis tranquillus in undis*.[1]

6. Two of the important features of the Canadian, as well as of the Scotch banking system, are the large capital required by the banks and their system of branches. While each feature is capable of separate discussion, they are more or less connected with each other, from the fact that the requirement of a large capital limits the number of the banks and makes the establishment of branches necessary to afford banking facilities to the country. The minimum paid-up capital required in Canada prior to the revision of

[1] Breckenridge, 451.

1890 was only $100,000. The law of 1890 required subscriptions to the capital stock of each new bank to an amount of not less than $500,000 and actual payments to the amount of $250,000. No new bank is permitted to begin business or to issue notes until it has satisfied the Treasury Board that it has paid into the hands of the Minister of Finance at least $250,000, has made a deposit for the security of its note issue, and has otherwise complied with the provisions of the Bank Act.[1] The paid-up capital of the thirty active Canadian banks on October 31, 1908, was $92,800,387, or an average of more than $3,000,000 to each bank. The paid-up capital of 6,853 national banks in the United States on September 23, 1908, was $921,463,172, or an average of about $134,000 to each bank. The capital of the larger Canadian banks was: Bank of Montreal, $14,400,000; Canadian Bank of Commerce, $10,000,000; Merchants' Bank, $6,000,000; Imperial Bank, $4,994,200; Bank of British North America, $4,866,666; Traders' Bank, $4,353,092; Bank of Toronto, $4,000,000; Dominion Bank, $3,980,000; Royal Bank, $3,900,000. The thirty Canadian banks had, however, in October, 1908, branches in Canada to the number of 1901, of which 908 were in Ontario, 308 in Quebec, 104 in Nova Scotia, 58 in New Brunswick, 16 in Prince Edward Island, 162 in Manitoba, 103 in Alberta, 137 in Saskatchewan, 102 in British Columbia, and three in Yukon. The remarkable growth of Western Canada is indicated by comparison with the figures of 1896, when there were only 43 branches in all the northwestern provinces, where the number in 1908 was 504. Thus Canada, with about 6,000,000 inhabitants in 1908, was equipped with a banking office for about every 3,150 people, while the United States, with about 88,000,000 inhabitants, had only one national bank for about every 13,000 people.

The experience of ten years between the Bank Act of 1890 and that of 1900 suggested several improvements of detail in the law, which were supplemented by additional legislation after the American crisis of 1907. The new measures were largely in the direction of co-ordination and mutual support

[1] *Revised Statutes*, 1906, ch. 29, sec. 15.

among the banks. These ends were accomplished by conferring important powers on the Canadian Bankers' Association, which had been organized in 1892 as a private voluntary association. Under its original powers, the association consisted of the various banks, with their officers and employees, and acted through an executive council, whose acts were subject to approval or veto by the Association at its annual meetings.[1] This Association in 1900 was given corporate form and authorized to establish clearing houses and to make rules for their government, subject to the approval of the Treasury Board of the Dominion Government. Authority was given to the association to regulate the making and issue of bank-notes in order to promote uniformity and prevent fraudulent over-issue.[2] Up to 1908 the action taken under this head was only to arrange for returns from the bank-note printing companies of monthly statements of notes delivered to the respective banks and to compare these statements with similar statements from the banks of notes received and destroyed. Many Canadian bankers favor the ultimate introduction of the American system, by which a central authority shall control absolutely the making and cancellation of the notes.

Of a broader character were the provisions of the Act of 1900 regarding the management of suspended banks. This subject was placed substantially under the control of the Canadian Bankers' Association, by conferring upon it authority to appoint a curator to conduct the affairs of a suspended bank until it might resume or liquidate. The curator thus appointed is subject to removal by the Association. He has "all powers and shall take all steps and do all things necessary or expedient to protect the rights and interests of the creditors and shareholders of the bank, and to conserve and

[1] Breckenridge, in *Quarterly Journal of Economics*, August, 1900, XIV., 545

[2] It was just before the revision of 1900 was undertaken that fraudulent over-issues of notes by the *Banque Ville Marie* were discovered, amounting to about $300,000. — *New York Bankers' Magazine*, March, 1900, LX., 334.

ensure the proper disposition, according to law, of the assets of the bank."[1] This power to take control of the affairs of a suspended bank was first availed of in 1905 in the case of the failure of the Bank of Yarmouth.

Minor amendments of the law in 1900 reduced the rate of interest on the notes of a failed bank in the hands of the public from six to five per cent., and imposed a charge upon the assets of the failed bank of three per cent. upon the amount paid for the redemption of notes from the Bank Circulation Redemption Fund beyond the amount in the fund at the credit of the bank. Another new provision prohibited the issue of notes during a period of suspension, in order to convert claims of favored depositors or other creditors into a first lien.[2] While no specific provision was made in regard to reserves, an opinion has grown up that not less than fifteen per cent. of demand liabilities should be held in gold and Dominion notes, and banks falling materially below this proportion are admonished by the Bankers' Association.[3]

The rapid growth of Western Canada created a demand for currency and for banking accommodation which explains the expansion of note circulation and banking assets in the twentieth century. The demand for currency was met in part by the issue of Dominion notes, which were absorbed into bank reserves under the requirement that such reserves should consist of notes in the proportion of at least forty per cent. The Minister of Finance proposed in 1903 an increase in the authorized issue, covered by a twenty-five per cent. gold reserve, from $20,000,000 to $30,000,000. Any amount in excess may be issued upon the deposit of gold for the full amount.[4] The banks held total reserves of both specie and

[1] *Revised Statutes*, 1906, ch. 29, sec. 119.

[2] Act of 63–64 Victoria, ch. 26, sec. 10.

[3] *U. S. Consular Reports*, May 14, 1907, 3. Much of the gold used in Canada is coin of the United States. A computation made in 1907 put the amount of such gold in the Dominion Treasury at $29,494,298, and in chartered banks at $11,320,323, being respectively about 80 and 57.56 per cent. of total specie held.

[4] *New York Bankers' Magazine*, August, 1903, LXVII., 246.

notes at the close of 1897 to the amount of $25,994,071. After the two items were separately stated, under the law of 1900, specie holdings on December 31st increased from $11,773,336 for 1900 to $12,892,235 for 1902 and $25,119,474 for 1907. The increase in holdings of Dominion notes over the same period was from $19,785,173 for 1900 to $24,730,575 for 1902 and $49,963,860 for 1907.

In spite of the elasticity of the Canadian system, it did not prove quite equal to the combined pressure of the crop movement of 1907 and the suspension of payments by the American banks. The rapid growth of the Northwest made the financing of the crop movement a serious undertaking even in the absence of any special crisis. It was the practice of the banks to make arrangements to accumulate large supplies of notes at convenient points, with Winnipeg as the chief centre, long before the actual date for the movement to begin. The farmer bringing his wheat to the grain elevator would receive a voucher called a grain ticket, specifying the weight of the grain sold and the price paid for it. These tickets were cashed both by banks and by country storekeepers from the stock of bank-notes accumulated for the purpose.[1] Bad crop conditions in the autumn of 1907 combined with disturbances in the United States to curtail the credits thus granted. Appeal was made by Western boards of trade and the Grain Growers' Association of Manitoba to the government for assistance. The banks at first opposed government intervention, but a plan was finally put in operation which had general approval.

The government decided to exceed the legal limit of Dominion note issues in order to place currency at the command of the farmers. The proposal at first made, that these notes should be advanced directly to the banks in the crop-moving district upon the deposit of securities, was modified so that the securities were submitted through the Bank of Montreal as intermediary. The Bank of Montreal guaranteed repayment of the advances made to the other banks.

[1] Trigge, "How Canada Provides Currency for Moving the Crops," in *New York Bankers' Magazine*, June, 1906, LXXII., 838.

Interest was paid by the banks to the government at the rate of four per cent. for the first fifty days, five per cent. for sixty days, and six per cent. for any longer period. The announcement of this measure allayed anxiety in the West and permitted the prompt movement of the crops. The amount of notes issued was $5,315,000, all of which was promptly returned and cancelled when the crisis was over.[1]

Out of this strain upon Canadian banking resources grew a further extension of the elasticity of the note issue, by the Act of July 20, 1908.[2] This act provided in substance for additional note issues under a heavy tax. The authority to make such issues was limited to the period from October in any year to January 31st following, and the rate of the special tax was to be fixed by the Governor in Council, but at not more than five per cent. The proceeds of the tax go into the Consolidated Revenue Fund of Canada. Notes may be issued under these provisions, upon the initiative of the bank, but the amount must not exceed fifteen per cent. of paid-up capital and reserve funds.[3] This authority was availed of frequently by the banks during the following four years, but failed to meet entirely the great increase in banking credit required by agricultural and industrial expansion. A further law was enacted, therefore, in 1913, which took effect on July 1st of that year, permitting the issue of bank-notes upon deposits of gold in central reserves. Under this law it became possible for the banks to increase their note issues indefinitely, at any time of the year, to the amount of the gold or Dominion notes deposited in the central gold reserves, and without the payment of any tax. While it might seem that such issues, being fully covered, afforded no room for profit to the banks, the system permitted those banks which habitually carried strong reserves to transform a part of them into notes without essentially weakening their

[1] Ottawa letter in *New York Evening Post*, June 1, 1908, 1.

[2] Act of 7-8 Edward VII., ch. 7.

[3] It was stated by the Minister of Finance, while the bill was pending, that this would permit an issue of "emergency currency of $24,619,385—much more than sufficient to meet any possible contingency."

position. The use of this privilege was easy in Canada because of the absence of legal reserve requirements, and the banks very generally preferred this method of increasing their issues to the payment of the high tax on excess issues authorized by the law of 1908.[1] In the first year of the new provision, 1913, the month of November closed with gold deposits in the central reserves of $8,100,000, against which notes were outstanding to the amount of $5,554,634.[2]

It is maintained by the advocates of the Canadian system that the combination of large capital and numerous branches has many advantages. It secures on the one hand a unity of policy on the part of the leading banks in times of stringency far different from the playing at cross-purposes which distinguished the action of the national banks of the reserve cities in the United States in the panic of 1893. The Canadian system, on the other hand enables the large banks to distribute accommodation evenly throughout the system, to mass currency where it is most needed, and by means of their power of note issue to equip every branch with ample resources for sustaining commercial credit.

Almost inevitably, with the development of large enterprises and the growth of capital in Canada has occurred a concentration of banking power in the hands of a few of the leading banks and the absorption by them of some of the smaller local institutions. The long dominance of the Bank of Montreal, which gave it something of the influence of a central bank, has been contested in recent years, in point of size at least, by the Canadian Bank of Commerce and the Royal Bank of Canada, each of which has resources of approximately $200,000,000. The Royal Bank has reached into the foreign field by establishing strong branches in Havana, and other points in Mexico and the West Indies, and by the acquisition in 1912 of the Bank of British Honduras and in 1913 of the Bank of British Guiana.

[1] *Vide* New York *Bankers' Magazine*, July, 1913, LXXXVII., 22.
[2] *Ibid.*, March, 1914, LXXXVIII., 291.

The leading items of the accounts of the Canadian banks for representative years have been as follows[1]:

DEC. 31ST.	NO. BANKS.	PAID-UP CAPITAL.	NOTE CIRCULATION.	DISCOUNTS.
1841	9	$11,380,000	$ 455,000	$ 16,400,000
1851	8	14,480,000	810,000	27,800,000
1861	16	24,410,796	11,780,364	39,588,842
1867	28	32,500,162	10,102,439	54,899,142
1873	28	57,931,359	29,016,659	119,647,350
1876	39	66,137,315	23,275,701	122,562,334
1880	36	59,819,603	27,328,358	105,587,672
1885	41	61,763,279	32,363,992	125,493,660
1890	38	60,057,235	35,006,274	153,236,184
1891	38	61,299,305	35,634,129	186,590,602
1892	39	61,938,515	36,194,023	198,532,160
1893	39	62,099,243	34,418,936	200,397,498
1894	39	61,683,719	32,375,620	195,836,141
1895	38	62,196,391	32,565,179	202,088,259
1896	38	61,731,354	33,095,784	210,522,074
1897	38	62,289,326	37,985,123	205,931,017
1898	38	63,241,533	40,258,381	229,900,030
1899	38	63,584,022	45,999,753	266,678,601
1900	36	67,087,111	50,758,246	295,726,182
1901	34	67,591,311	54,372,788	321,319,223
1902	35	62,795,440	60,574,144	357,010,326
1903	33	78,563,236	62,539,407	415,263,355
1904	34	80,055,596	64,507,394	431,124,244
1905	34	85,294,210	69,981,574	489,238,325
1906	34	95,509,015	78,416,780	585,158,711
1907	34	95,995,482	77,504,398	579,516,639
1908	30	96,457,573	73,058,234	511,808,909
1909	29	97,808,617	81,325,732	592,741,812
1910	27	99,676,093	87,694,840	667,064,829
1911	27	107,994,604	102,037,305	774,909,172
1912	25	114,881,914	110,048,357	881,331,981
1913	22	114,809,297	108,646,425	822,387,973

[1] The table gives only a general view of the progress of Canadian banking operations, without permitting absolutely exact comparisons, because of the changes in the form of the official reports which were made in 1870, 1872, 1880, and 1890. The figures for 1841 and 1851 are reduced from pounds sterling, in which the accounts were then expressed, and with those of 1861 cover only the Dominion of Canada, without including New Brunswick and Nova Scotia. The changes in the form of statement affect principally the item of discounts, which included substantially all loans in 1867, but excluded certain advances on securities and on current accounts between that date and 1890.

CHAPTER XVII.

THE BANKING SYSTEM OF MEXICO.

Early Banking Establishments—Comprehensive Character of the Legislation of 1897—The System of State Banks of Issue—The Adoption of the Gold Standard—Difficulties which were Overcome—The Commission of International Exchange—Question of Establishing an Exchange Fund—Importance of Avoiding Injury to Mining Interests—Growth in Banking Business.

THE recent monetary history of Mexico is of peculiar interest, because the government has not hesitated to adopt, both in banking and in coinage, constructive policies differing in some respects from those of most other nations, but based upon careful study of general economic principles as adapted to the special conditions prevailing in the republic. Mexico was almost without banking and monetary organization prior to the second election of President Diaz in 1884, and it is due largely to his foresight and constructive ability that she has been dowered with both within less than a generation.

Before the revision of the Commercial Code in 1884 there had been no general banking law in Mexico and such banking institutions as did business there represented, not only foreign capital, but foreign management. Prior to 1864 such banking as was carried on was done by large commercial houses having foreign relations and often took the form of hazardous speculation. In 1864 came the first real bank in the form of a branch of the London Bank of Mexico and South America. This institution entered Mexico without authority or special privileges and, while it was subjected to many attacks, it succeeded by the conservatism and sound-

ness of its operations in introducing to a limited extent the use of bank-notes.[1] In 1881 a concession was granted by Congress to some French bankers for the foundation of a bank of issue, which began business in 1884 under the name of the National Bank of Mexico and engaged to perform the banking business of the government. The capital at the foundation was $8,000,000, of which forty per cent. was paid up.[2] The National Bank encountered violent competition from the Mexican Mercantile Bank, which sprang into being without special concessions and continued in business until 1893, when it was absorbed by the National Bank. This fusion was brought about by pressure from the government, and the capital of the National Bank was increased to $20,000,000.

The revision of the commercial code in 1884 provided against the further creation of banks without concessions from the government and limited the right to accord such concessions to the Federal authorities. Those banks already in existence, including several in the State of Chihuahua, were recognized as having certain vested rights and were afterwards referred to as the chartered banks in distinction from the banks which were given exclusive privileges in the states in which they were established. The regulations of 1884 were derived in part from the American law, and required the circulation to be guaranteed by a deposit of money or securities of the public debt to the amount of one-third of the notes. The defects of this system were soon recognized and a more scientific and complete code was substituted.[3]

[1] Favre, *Les Banques au Mexique*, 9.

[2] The unit of value in Mexico is the peso or dollar, which before the decline in silver bore to the American silver dollar the proportion of $1.012 in value. As the value of silver bullion declined, the gold value of Mexican coins declined, approximately *pari passu*, until the monetary reform of 1905. Values herein given in dollars represent a corresponding number of Mexican pesos, without regard to fluctuations in their gold value.

[3] Señor Casasus, who wrote the masterly report upon which the law of 1897 was based, declared that "the very worst system under the empire of which banks of issue can be created is without doubt the

It was by the law of March 19, 1897, that uniformity was brought effectively into the banking organism of Mexico and a system adopted conforming, in the opinion of the government, to the diversified needs of the country. The law was one of the results of the constructive policies adopted by Señor J. Y. Limantour, who became Minister of Finance in 1893, having for their aim the erection of Mexico into a modern commercial state. Three classes of incorporated banks were recognized by the new legislation—banks of issue, mortgage banks, and banks especially designed for loans to agriculturists. Only the first class concerns us here, except to note the fact that Señor Limantour recognized the principle that banks issuing notes should deal only in short-term paper, while the mortgage banks were authorized especially for the purpose of issuing obligations for those enterprises which required time and the permanent investment of capital for their development.[1]

The principle of monopoly of issues was rejected, because it was in conflict with vested rights and because of the diversity of interests in different parts of Mexico. In the place of a central bank of issue the foundations were laid for a qualified monopoly in each of the thirty states of the republic, by giving to the bank first created in the state advantages over later competitors. Capital, dividends, and instruments of credit issued by such a bank were to be exempt from all taxes, federal or local, except the stamp tax, and even the latter was not to exceed five centavos in any case for the privileged banks, while it might be much higher for all others. These later comers in states already having banks of issue were subject not only to all local and federal taxes, but were required specifically to pay two per cent. annually upon their capital.[2] Finally, it was prohibited to any bank

American system, because it has made the state the sole body which issues notes and because it has provided the public debt as their guarantee."—*Les Institutions de Crédit*, 189.

[1] Favre, *Les Banques au Mexique*, 20.

[2] *The New Banking Law of the Republic of Mexico*, Articles 121–129. The exemptions were only for twenty-five years from the date of the law.

to establish branches outside the state where it was established without special authority from the Ministry of Finance.

The notes of the Mexican banks are a first lien upon their assets, after claims of the government and certain obvious legal exemptions.[1] The assets of the banks are left in their own custody, but subject to certain requirements as to their character and as to reserves held. In the revision of 1897 Señor Limantour definitely rejected the principle which had been adopted from the American law in the code of 1884, that the reserve of one-third against circulation might consist of money or securities. Conscious that the financial fate of the country should not be linked with its political disturbances, he said[2]:

> What would be the influence of such a deposit [of securities] upon the credit of a bank in a case where, in consequence of the vicissitudes of policies domestic or foreign, the securities of the state should precipitately decline? Would it not enhance rather the intensity of the evil, by the fall in the value of the guarantee at the very moment when the general crisis paralyzed transactions, when cash disappeared, and payments were accomplished with difficulty?

Convinced of the soundness of this view, Señor Limantour required the banks in the new law to maintain actual cash to the amount of fifty per cent.; but he went farther than to require it against circulation alone and required it against the aggregate of outstanding notes and of deposits payable on demand or within three days. The deposits as interpreted by Mexican law, did not, however, include the current accounts opened in favor of clients and carried to their credit. The issue of bank notes was permitted under these conditions to the amount of three times banking capital. If circulation should exceed this limit, the bank would first be warned to cease advances until the proper ratio of circulation should be restored, and if after forty-five days, at the maximum, conditions should continue contrary to law, the concession of the bank would be forfeited.[3]

[1] *The New Banking Law*, Art 25.

[2] Favre, 40.

[3] *The New Banking Law*, 24.

The minimum capital of a bank of issue was fixed by the law of 1897 at 500,000 pesos ($250,000) and it was provided that the privileges granted by the law should terminate after thirty years. The notes of the Mexican banks are not legal tender and are redeemable in coin on demand at the office where they are issued. The maximum period of discount allowed to the banks of issue is six months, and paper discounted must bear at least two signatures.[1] The system of discounting commercial paper is not, however, widely in vogue in Mexico. It is replaced by a system of advances to the client of the bank, upon the deposit of the paper as security, and these advances are often made for nine months or a year.[2] The banks are required to publish their balance sheets monthly in the *Official Journal*, and the form in which the various items shall be stated is carefully prescribed. They are also subjected to a comprehensive system of inspections, which in 1904 was placed under the direction of an inspector-general.[3] Ten per cent. of profits is required to be added annually to the surplus until one-third of the capital is attained.

The execution of the law of 1897 was contrary to the privileges of the National Bank of Mexico, which included the pledge of the government that it would not permit the creation of additional banks of issue. Negotiations took place, however, which led the bank to waive this privilege and in addition to increase its advances to the Treasury from 2,000,000 to 4,000,000 pesos, to reduce from two to one and three-quarters per cent. the commission charged upon the Treasury service, and from two per cent. to one per cent. the commission for the service of the debt. In return for

[1] The extension of the reserve requirement to deposits and the lengthening of the term of the commercial paper held are represented by Señor Casasus as mutual concessions. He says regarding the six months' limit for paper that "the commercial customs of the republic are not in this respect like the European practice, which has served as a standard to the economists who have studied the mechanism of banks of issue."—*Les Institutions de Crédit*, 490.

[2] Favre, 45.

[3] *Ibid.*, 33.

these concessions, it obtained an extension of its charter for fifteen years, carrying it to 1949, and the suspension for ten years of the right of the *Mont de Piété* to issue certificates of deposit or bills payable to bearer.[1] With branches scattered all over Mexico, which were not interfered with by the new law, and retaining the function of banker for the state, the National Bank continued to be one of the most potent organs of foreign investors in Mexico, and in 1906, under the stimulus of the adoption of the gold standard was able to increase its capital by 17,000,000 pesos.

Another organ which grew logically out of the new order of things, and which has done much to bring about harmony and co-operation between the banks, was the creation in February, 1899, of the Central Bank of Mexico (*Banco Central Mexicaño*). It was the purpose of this bank to afford a means of union between the scattered state banks and incidentally to facilitate the clearing of their notes and other obligations. To this end it was provided that a state bank which wished to avail itself of the privileges offered by the Central Bank should subscribe at least one-tenth of its capital to the capital of the new institution. As it was not intended to preclude the subscription of capital from other sources, the shares were divided into two classes, those held by the banks, which could not be alienated, and those of private shareholders, which might be converted into the former class when deposited for that purpose by a bank.[2] Under the contracts made with the local banks, each local bank maintains an account with the Central Bank, which may be in favor of the local bank or against it. Different rates of interest are charged or paid under different conditions. The Central Bank buys bills from the local banks to the

[1] Favre, 61. It was declared in December, 1907, by the Minister of Finance, that "the importance of the rôle played by the National Bank in our system of credit as a reserve bank is becoming daily more manifest, as is also the fact that its large cash holdings and its conservative policy afford the most solid guarantees to the business interests of the country."—*Budget for the Fiscal Year 1908–09*, 15.

[2] Favre, 64.

amount of the credit which has been granted them, but may refuse those which it considers unacceptable. The Central Bank and the local banks aid each other in making collections, and the Central Bank represents the local banks in dealing with the Federal Government. Special provision is made for unusual pressure upon any bank in the system. As soon as an appeal is received on this ground, the Central Bank telegraphs immediately to the other banks, who are bound to create at the Central Bank a fund equal to fifty per cent. of the capital of the threatened bank, but not in excess of two per cent. of the capital of the contributing banks. This fund is employed in buying at par the bills of the threatened bank, which pays for the amounts advanced at the rate of twelve per cent.

The work of putting the banking system upon a modern basis had hardly been achieved when Señor Limantour turned his attention to the subject of the metallic standard. Mexico had been upon the silver basis from the times of the Spanish conquest and its standard coins had found their way through the gateways of Europe and the Philippines—which was at one time an appanage of Mexico—into China, Japan, and most of the countries of the China Sea.[1] But the gradual fall in the gold price of silver, accentuated in 1902 by the lowest level ever touched by the metal, convinced Señor Limantour and his advisers that Mexico must follow other advanced nations onto the gold basis. The public finances were deranged by the fall of silver, because much of the foreign debt of the country had been contracted in gold, and the import trade had been reduced almost to gambling because exchange with gold countries had become so fluctuating. More important still was the effect of the fall of silver

[1] Casasus maintains that the amount of Mexican coin reaching the East by way of the Philippines did not go beyond an annual average of $1,000,000, but that in colonial times the coins first went to Spain and then flowed to the East "through three principal highways. firstly, trade with the Levant, Egypt, and the Red Sea; secondly, maritime commerce with the great Indies and China; and thirdly, Russia's trade with China and Tartary." — *Currency Reform in Mexico*, 339.

and its incessant fluctuations upon the earnings of the railways and the refusal of foreign capital from gold countries to embark in the extension of the railway network or in other Mexican enterprises. While many local enterprises profited after a fashion from the rise in exchange, the railways were governed by official rates, which the government only tardily, in 1902, authorized them to change.[1]

Confronted by these conditions, Minister Limantour obtained the approval of President Diaz for the appointment of a monetary commission to investigate all phases of the subject of the metallic standard.[2] While this commission was at work in Mexico, beginning in the spring of 1903, another step was taken by the Mexican Government, designed to secure a certain degree of international co-operation in establishing more stable exchange between other silver-using countries and gold-standard countries. Notes substantially identical in language were addressed in January, 1903, by the representatives of China and Mexico to the Government of the United States, asking the aid of the latter in presenting the subject to those governments having commercial and territorial interests in the Orient. It was pointed out that the imports of certain silver-using countries reached a total of $574,627,323 (in United States gold coin), and that "the problem of securing relative stability of exchange between the gold and silver countries is one whose importance is not limited to silver countries, but comes home with force

[1] The companies obtained the right to increase rates by fifteen per cent. when exchange on New York was above 220—Viollet, 82. Although gross earnings of all Mexican lines had increased from $22,220,191 in 1893 to $40,853,981 in 1900, net earnings per mile in gold had fallen off. In the case of the Mexican Central net earnings per mile in 1893 of $1498 (gold) had declined in 1901 to $1029.—Casasus, *Currency Reform in Mexico*, 215-17.

[2] President Diaz was at first reluctant to take up so far-reaching a subject, feeling that the many constructive measures which he had carried out for the benefit of his country entitled him to a certain degree of repose in his declining years; but was finally persuaded by Minister Limantour and Mr. Enrique C. Creel to take the initial steps.

to all those gold-standard countries which are seeking markets for their products in silver countries and are seeking the extension of their trade in the Orient.[1]

The Government of the United States responded favorably to this appeal and President Roosevelt, under authority of Congress, appointed a commission of three members to cooperate with a commission appointed by Mexico to present the subject to other governments.[2] These commissions visited successively London, Paris, The Hague, Berlin, and St. Petersburg, where they conferred with commissions appointed for the purpose. The result of the American mission was an agreement between representatives of all the governments visited—those of Great Britain, France, the Netherlands, Germany, and Russia—which was well expressed by the first resolution adopted at London[3]:

> That the adoption in silver-using countries of the gold standard on the basis of a silver coin of unlimited legal tender, but with a fixed gold value, would greatly promote the development of those countries and stimulate the trade between those countries and countries already possessing the gold standard, besides enlarging the investment opportunities of the world.

There was not absolute agreement among the various Powers in regard to the best means of reaching this result, but in most cases it was agreed that the ratio of 32 to 1 should be adopted as the relation between the gold standard and the new silver coins. This fundamental resolution was an endorsement of the principle of the gold-exchange standard.

Not much more than a moral effect was anticipated by the Government of Mexico from the efforts made abroad. Public opinion was still sensitive in the United States, and to some extent in Europe, against international bimetallism, for

[1] *Commission on International Exchange, 1903*, 39.

[2] The members of the American commission were Hugh H. Hanna of Indiana, Charles A. Conant of New York, and Professor Jeremiah W. Jenks of New York. The members of the Mexican commission were Enrique C. Creel, President of the Banco Central; Luis Camacho, financial representative of Mexico in London; and Eduardo Meade of San Luis Potosi.

[3] *Report of the Commission on International Exchange, 1903*, p. 141.

which the United States had made their last abortive effort in 1897.[1] It was expressly declared, therefore, in both the Mexican and Chinese memoranda to the United States, that it was not the expectation or the wish "that the gold standard countries should take any action tending to impair their monetary standard or to make material changes in their monetary systems.[2] One of the objects sought, however, was to bring about greater regularity in the purchase of silver bullion by different powers, when required for coinage purposes, in order to diminish fluctuations in exchange with silver countries. The soundness of this policy was recognized by the British Government and was afterwards adopted on a large scale in purchases of silver for India.[3]

While the Commission on International Exchange was pursuing its mission in Europe, the commission appointed to study the subject at home continued its inquiries through several sub-committees. The fourth sub-committee, which was charged with analyzing the effects of the fall of silver, reported in favor of a system of stable exchange for Mexico at a ratio of 33 to 1. The full commission held its final sitting on February 10, 1904, and in its report recommended the adoption of a system based on the gold standard. They did not advise the adoption of a gold currency, but of a system which would keep silver in circulation in quantities as large as possible without impairing the maintenance of the ratio with gold which might be adopted. To these ends it was recommended:

(1) That the mints be closed to the free coinage of silver,

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[1] *Vide* "Statement respecting the Work of the Recent International Bimetallic Commission," by Senator Wolcott of Colorado, in United States Senate, January 17, 1898. It was then proposed to the Government of British India that it should retrace the steps of 1893 by again opening its mints to free coinage of silver, but this was met by a "unanimous and decided opinion" on the part of the government against such action.—*Commission on International Exchange, 1903*, 303.

[2] *Commission on International Exchange, 1903*, 45.

[3] *Vide infra*, Ch. XXI.

and that the reimportation of Mexican pesos be prohibited after proper delay;

(2) That a ratio be established between gold and silver based upon the average gold price of silver for the preceding ten years, which should not be raised more than ten per cent.;

(3) That gold should not at first be coined for either the government or individuals, but that such coinage should be deferred until the new coin should have attained parity with gold and when in the opinion of the government the circulation of gold would not impair the maintenance of this parity.[1]

A plan for carrying out these ideas was presented to Congress by Minister Limantour on November 16, 1904, which reviewed all sides of the discussion which had been taking place in Mexico, frankly discussed the merits and defects of the old system, and pointed out the means of establishing the new. In this report the argument that the export trade profited by a depreciating currency was examined and found to have little foundation in the commercial history of Mexico. It was the conclusion of the minister that the expansion of the mining industry, though facilitated by the depreciation of the local currency, could not be ascribed to that as the chief cause, but to other causes, foremost among which were the construction of railways into new regions, the cheapening of transportation rates, and modern methods of treating the ores. Turning to the figures of gross export trade, it was pointed out that during the ten years ending with 1891, when the fluctuations in the gold value of silver were slight, total exports rose from $26,000,000 to $53,000,000 in American gold, while for the ten years ending with 1901, during which the value of the Mexican peso fell from 84 to 48 cents in gold, the increase in the value of exports, reduced to gold, was only from $63,000,000 to $77,000,000, or about twenty-two per cent.[2] The Minister

[1] *Commission on International Exchange, 1904*, 419.

[2] *Monetary Reform in Mexico*, 4. This subject was discussed and similar conclusions reached in a paper submitted to the Mexican

did not adopt, in terms, the conclusion of members of the American Commission in 1903, that, under the system of a falling monetary unit, "Mexico had in recent years given up a growing proportion of the products of her own labor and intellectual efficiency in return for foreign products"; but in his report in the autumn of 1905 he brought out the corollary of this proposition, that the rise in the unit in 1905 enabled Mexico "to purchase a much larger quantity of foreign merchandise without any very material increase in our remittances abroad."[1] An important factor in the progress of recent years, too often ignored by those who ascribed this progress to the silver standard, was the abolition of the *alcabalas*, or interior customs taxes at state lines. It was not until the middle of the year 1896 that this reform was effected, with the result of relieving commerce from a galling exaction and greatly stimulating the public revenue from other sources.

A measure to carry out the reforms proposed by Minister Limantour was submitted with his report and became law on December 9, 1904. This law declared that the existing silver coin, containing 24.4391 grams of pure silver and 2.6342 grams of copper should continue to possess full legal-tender powers, but that it should have a value equal to 75 centigrams of pure gold. The issue of money of all kinds was reserved to the executive, who was also clothed with authority to forbid or tax the importation of Mexican pesos into the republic; to continue coinage of old pesos for export; to modify the form of the peso; to authorize the

Commission by the present writer, Professor Jenks, and Mr. Edward Brush, April 18, 1903. See *Commission on International Exchange, 1903*, 431–39. It was also discussed exhaustively by Señor Casasus, *Currency Reform in Mexico*, 193–239. On the same subject in other countries, *vide* the author's *Principles of Money and Banking*, I., 347–51.

[1] *Financial Documents, 1905*, 4. The Minister calculated that exports valued in silver, amounting for the fiscal years 1903, 1904, and 1905 to $207,377,793, $210,312,374, and $208,520,451 respectively, worked out in gold value, at the average rate of exchange, at $82,950,000, $91,440,000, and $101,710,000 respectively.

circulation for a limited time of the gold money of other nations; to modify the mining laws by reducing the charge of two per cent. upon coinage, the stamp tax of three per cent., and the charges for assaying, smelting, and refining; to modify the taxes on mine titles and various local taxes; to exempt mining machinery from import duties; to arrange for advances upon silver bullion and for its sale under favorable conditions at home and abroad, and to create a commission for the purpose of maintaining stability of exchange, to which should be confided a special fund to be created by the executive and such powers as the executive thought proper.[1]

Sweeping as these measures were, they indicated a certain division of opinion as to the effective steps required for maintaining parity. Although Mr. Creel, chairman of the Commission on International Exchange, had urged that exchange funds should be established in New York and Europe, and had upon this point been vigorously supported by members of the American commission, he was overruled by the majority of his associates.[2] Minister Limantour accepted in a tentative way the view of the majority, that the appreciation of the silver peso to gold parity could be brought about by scarcity, but by the institution of the commission on money and exchange the view was recognized that some-

[1] The text of this bill (in English) is given in *Monetary Reform in Mexico*, 24–25, and in the *Report of the Commission on International Exchange, 1904*, 449–50.

[2] Considerable divergence of opinion existed even among the advocates of an exchange fund as to just how it should be constituted. Señor G. Raigosa supported substantially the plan recommended by the present writer for the Philippines and quoted copiously the criticisms of the Indian policy of relying upon scarcity to raise the value of the coin. Señor Casasus believed it would be necessary to negotiate a considerable foreign loan, but all three subscribed to the declaration that "a stock of gold, whether in circulation or held in deposit, owing to the fact that it consists of exportable coins, is the only guarantee for the stability and safe operation of a monetary régime based on the artificial elevation of the value of a coin due to the suspension of free coinage."—See *Commission on International Exchange, 1904*, 352–390.

thing more than scarcity must be relied on, under all the conditions of international trade and the money market, to maintain permanently a parity once attained. It will be seen in the sequel that while events moved propitiously for the achievement of the reform, the work of the exchange commission attained an importance which contributed much to assure this success.[1]

The event which contributed most to allay doubts and to permit the government to advance from the ground of experiment to that of accomplishment was the rise in the price of silver bullion. The hiatus in the demand for the metal which had carried its price down to 21 11/16 pence in December, 1902, and January, 1903, was at length passed, and during the period from April, 1903, to the beginning of 1905 silver moved slowly, but almost uninterruptedly, upward.[2] In January, 1905, the London price was 28 3/8 pence—an advance of nearly one-third over the low point of 1903. On March 25, 1905, therefore, although silver had then receded to about 26 pence, the new gold standard was put into effective operation. A step towards the policy of India was introduced into one of the laws now promulgated by the provision that henceforth, except for recoinage, new silver money should be issued only in exchange for gold coin or bars at the legal parity. It was wisely provided that this exchange of silver for gold should cease to be obligatory when silver rose above the legal parity.

In spite of Señor Limantour's confidence in scarcity as a means of bringing about parity, a fund was constituted by Section 27 of one of the new laws, called "Fund for the regulation of the monetary circulation," with the avowed object of facilitating the adaptation of the monetary circulation to the requirements of stability in foreign exchange.

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[1] Viollet, while pointing out the difference between the attitude of Señor Limantour and the present writer on this subject, intimated that Señor Limantour may have had for his attitude a motive which was unavowed.—*Le Problème de l'Argent et l'Étalon d'Or au Mexique*, 199–201.

[2] *Commission on International Exchange, 1904*, 28.

At the same time (April 3, 1905), a commission of money and exchange was created and a fund of 10,000,000 pesos was placed under its control, deposited in part at the National Bank of Mexico and in part at the other principal foreign banks. These funds were destined to support exchange by enabling the commission to buy or sell gold drafts according to the state of the market.[1]

The work of the commission was given an entirely different direction from what was expected by the continued rise in the price of silver bullion, and by the close of 1905 Mexico was not only firmly established upon the gold standard, but was beginning to import gold in payment for her exports of silver. Up to the year 1904 exchange on New York had fluctuated in harmony, more or less exact, with the markets for silver bullion. During the latter half of 1904, however, this exchange became practically fixed at $2.16 in Mexican money for $1.00 in United States gold.[2] The reason was in part the rise in silver, but was also in part the known purpose of Mexico to establish soon the relation of two to one. With the further rise in silver in 1905, which carried the average London quotation for the metal to 27$\frac{13}{16}$ pence for the year, and to a maximum of 33$\frac{1}{8}$ pence early in 1906, it became no longer a question of maintaining the value of the silver coins, but of keeping them down to the gold value fixed by law.

The first importations of gold were encouraged by the government, in order to enable the banks to diversify their reserves, but before the close of 1906 the golden stream had become a torrent, and silver coins were freely exported because the market price of their bullion contents was above their legal value in Mexico. The cash holdings of the banks were $74,035,198 (Mexican currency) in July, 1905, and were almost wholly in silver. By January, 1906, the amount

[1] Viollet declares that this "completed in a happy way the reform, which could not have been accomplished if it had been founded exclusively on the scarcity of money."—*Le Problème de l'Argent et l'Étalon d'Or au Mexique*, 202.

[2] *Commission on International Exchange, 1904*, 29.

had fallen to $65,613,995, and of this amount $15,832,840 was in gold. By June, 1906, total cash holdings had recovered to $72,231,513, and of this amount $42,381,837 was in gold and only $29,849,676 in silver. Exports of silver from Mexico for the sixteen months ending with October, 1906, were $55,608,823, and the coinage of gold was $51,606,500.[1] The fear spread that the country would be denuded of the stock of subsidiary silver necessary to do business, and in the autumn of 1906 an export tax of ten per cent. was imposed upon the amount of silver coins sent abroad without the importation of an equivalent amount of gold.[2]

Fortunately the new monetary law, while leaving the old silver peso unchanged at 27.03 grams, provided for subsidiary silver coins both lighter in weight in proportion to their legal value (25 grams to the peso) and with a fineness of eight-tenths in pure silver instead of 0.902.[3] This precluded the profit which was found with the old pesos in exporting them for sale in the London silver market. The policy pursued by the government, therefore, was to refrain entirely from the coinage of pesos and to endeavor to fill the channels of circulation with gold, bank paper, and subsidiary silver. To this end, in December, 1905, the issue of gold certificates was authorized against deposits of bar gold and foreign gold coin. Every effort was made also to increase the coinage of subsidiary silver, until at the end of November, 1907, the amount coined in about two years and a half in pieces of 50 centavos was $26,186,619 and in smaller pieces $5,499,923.[4] It was calculated that the total exportation of Mexican silver coin since May 1, 1905, had reached in October, 1907, the sum of $85,956,202,[5] but this had been offset to the amount of about $75,000,000 by the coinage

[1] *Financial Documents, December, 1906*, 7.

[2] *Bulletin de Statistique*, January, 1907, LXI., 120.

[3] Decree of March 25, 1905, *Bulletin de Statistique*, May, 1905, LVII., 560.

[4] *Financial Documents, December, 1907*, 17.

[5] *Le Marché Financier en 1907-08*, 711.

of gold, which was finding its way into general circulation. By June 30, 1908, gold had become the predominant element in Mexican bank reserves and silver had fallen to a purely subordinate position, for of total metallic reserves of $76,696,893, gold constituted $52,788,145; the old silver pesos, $17,763,545; and subsidiary money, $6,145,203.[1]

Under these new conditions the banks and the country at large prospered greatly. The current of foreign capital, long restrained by the uncertainties of exchange, turned heavily in the direction of Mexico. Banking capital increased from $98,150,000 on June 30, 1903, to $176,100,000 on June 30, 1908, and the total assets of the banks from $379,525,207 to $756,522,309. It was officially estimated at the close of 1906 that new capital had entered the country to the amount of $86,500,000, without taking account of many small industrial enterprises.[2] Railway earnings increased from $50,500,000 in 1903 to nearly $57,000,000 in 1905.

If there was anything to be feared from this great accession of prosperity, it was the over-expansion of credit, and against this Minister Limantour put himself from the first on guard. The crash in the United States in the autumn of 1907 was not without its reaction upon Mexico. As a result, the Minister issued a circular on February 10, 1908, in which he cautioned the banks against unsound loans and invited them to a general conference in April. Out of these precautions grew the law of June 19, 1908, which imposed special restrictions upon banks of issue and upon other banks. The period within which new charters might be granted to banks of issue was extended to March 19, 1922, but no bank was to be created in future with a capital of less than $1,000,000. The business permissible to such banks was more carefully defined than before, among these prohibitions being a loan of more than ten per cent. to a single person or corporation.[3]

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[1] Official returns furnished by the Minister of Finance.

[2] *Financial Documents, December, 1906*, 10.

[3] *Bulletin of the Bureau of American Republics*, August, 1908, XXVII., 386.

The fabric of sound finance and public credit thus patiently and skilfully built up under the administration of President Diaz and Minister Limantour crumbled into a heap of ruins following the abdication of President Diaz in the autumn of 1911 and the murder of his successor, Francisco Madero, in February, 1913. The rate of exchange between Mexico and New York fluctuated violently as the result of the interruption of communications and the absence of safe means of transmitting currency. The value of the peso at the current rate of exchange fell even below the value of its silver contents.

Gold and silver disappeared from circulation in the autumn of 1913 and credit slips were issued by merchants in order to overcome the deficiency in small change. A decree was issued by President Huerta on November 5th relieving the banks from the obligation to pay gold or silver for their notes, and the Banco Central was greatly embarrassed by the presentation of the notes of state banks, which it lacked the facilities to send to those banks for redemption. The Bank of London and Mexico suspended currency payments on December 22d, but was protected by the announcement of a series of bank holidays, which operated in effect as a moratorium. Finally, on January 7, 1914, a decree was issued by President Huerta making the notes of all state banks legal tender and making their acceptance obligatory in all payments in all parts of the Republic. Provision was made in the decree for the creation of a guaranty fund to be subscribed by the banks and regulated by a commission.[1] Government paper was issued in Northern Mexico by the Constitutionalists, who finally entered the City of Mexico in September, 1914. The entire currency situation was thus left in much confusion, pending the restoration of internal peace and financial order.

[1] Press dispatch in New York *Evening Post*, January 7, 1914.

CHAPTER XVIII.

BANKING IN LATIN AMERICA.

The History of Brazilian Paper Money and the Restoration of a Fixed Gold Exchange—The Similar Experience of the Argentine Republic—Failure to Maintain Gold Payments in Chile—Banking Development in Paraguay, Uruguay, and the Northern States—The Exchange Standard in Peru—Monetary Systems of Cuba and Panama—Colonial Banks of European Countries.

THE banking systems of the American States and dependencies of the South offer a great variety of methods of note issue and a great variation in the safeguards thrown around such issues. Some of the banking systems of Latin America have been the development of time and experience; others have been framed as an entirety upon the model of some European system, sometimes with the approval of eminent foreign economists; and others are simply concessions by the governments to English capitalists who conduct the affairs of the banks from London. The domestic systems of banking and of currency have illustrated in many cases the fact that the best regulations do not always constitute a safeguard against unsound banking in countries where internal development is rapid, speculation is intense, and the conservatism of fixed conditions does not prevail. Bad as have been the results of some of the banking systems, their evils hardly kept pace for a time with the evils of government paper currency, which proved a serious fetter upon the prosperity of many South American States. With growth in population and in the extraction of national resources, however, there was a great improvement from about the close of the nineteenth century in monetary

conditions. In Brazil and the Argentine the paper money was gradually reduced and a system was established based upon the issue of paper at a fixed rate in gold, which restored to these countries most of the benefits of a gold standard.

Banking relations between Latin America and other continents have been chiefly in the hands of European bankers and trade with North America has been carried on through them. The first International American Conference, held in Washington in 1889, recommended the creation of an international American bank and several bills to this end were introduced in Congress, but up to 1908 the project had not reached a more tangible stage. At the third of these conferences, held in Rio de Janeiro in 1906, a step was taken towards closer co-operation in bringing about stable monetary conditions by the adoption of resolutions recommending to each government a study of the subject, and that these studies be effected through the International Bureau of American Republics at Washington, in order that a resumé might be distributed among the several governments at least six months before the meeting of the next conference.[1]

The Banking and Paper Issues of Brazil.

The monetary and banking history of Brazil fully set forth would contain much of interest bearing upon the effect of changes in the quantity of money upon its value and upon the possibility of maintaining comparative parity of foreign exchange without direct redemption of paper in coin. The issue of paper money dates back to soon after the coming to Brazil of the royal family, expelled from Portugal by Napoleon in 1808. As early as 1819, the paper became redundant and the exchange value of the milreis, which at par was five shillings seven and a half pence, fell to four shillings.[2] An effort was made in 1833 to restore fixity of exchange upon the new basis of three shillings seven and

[1] *Terceira Conferencia Internacional Americana, Acta da Decima Segunda Sessas em 23 de Agosto, de 1906*, 4.

[2] Wileman, *Brazilian Exchange*, 160.

a half pence (about 87 cents) to the milreis. The existing bank of issue was liquidated and its note issue was taken over by the Treasury. Another readjustment became necessary in 1846, by which the par of the milreis was fixed at twenty-seven pence. This remained the nominal gold par during the remainder of the century, although the actual value of the milreis went through a great variety of ups and downs.

Several circumstances of the Brazilian paper circulation between 1846 and 1889 gave some color to the theory that it is possible to maintain an irredeemable currency at par by regulation of the quantity.[1] Much was made of the fact that the government was able in 1860 to add 40,000,000 milreis to the circulation without causing a permanent decline of exchange below par. There was a depreciation of 4.161 per cent. in 1860 and 2.619 per cent. in 1861, but no depreciation in 1863 and 1864. The comparative stability of these years was due to the fact that the new paper took the place of a corresponding amount of gold which was expelled from circulation, while the balance of payments was influenced in favor of Brazil by foreign loans in 1858, 1859, and 1860. Fifteen years later, in 1875, a like phenomenon occurred, on the occasion of a foreign loan of £5,000,000 and unusually high prices for coffee. The effect of these loans was to offer a means of adjusting commercial and financial balances abroad without drawing upon the gold supply or compelling a readjustment of export prices.[2] While the steadiness of exchange in certain years verified the law that the value of money is influenced by the demand for it, the fluctuations in other years indicated that

[1] *Vide* Report of the Indian Currency Committee, 1893, Sec. 92, where the relative stability of the Brazilian exchange seems to be rather overstated. See table in Wileman, facing page 161.

[2] As Wileman points out: "When the currency is wholly inconvertible and there is little or no gold for export, it is clear that the fall of exchange is not the result of an increase in the demand for bullion alone, but of that for exports of all descriptions, of which bullion is merely the most important and representative item."—*Brazilian Exchange*, 9.

this law cannot be relied upon to give adequate stability to an irredeemable currency.

Whatever support might have been drawn from the earlier experiences of Brazil as to the stability of paper, the deluge of new paper poured into circulation after the fall of the Empire in 1889 left no room for delusions. The exchange of that year was favorable. The milreis, which had been at a discount of 6.48 per cent. in 1888, was at par in 1889, and exchange on London was at 27¼ pence. An important factor tending to stability was the fact that the combined circulation of paper and bank-notes was less in 1889 than in any year since 1877 and there had been no excessive issues since 1869.[1] But this favorable situation was radically changed by the new government. At the close of 1890 the circulation had been advanced to 336,730,462 milreis, an increase of more than sixty per cent.; the next year 513,827,357 milreis was reached; in 1892, 555,825,964; in 1893, 646,917,750; in 1894, 703,825,960; and in 1895, 789,464,096 milreis. Exchange on London, which measured the gold value of the paper milreis, promptly fell to 22⅝ pence on average for 1890; 16$\frac{5}{16}$ pence for 1891; 10$\frac{1}{16}$ pence for 1894; and finally to the low level of 5¾ pence for 1898. As in most paper money debauches, supply seemed never to equal demand, and the more the channels of circulation were flooded with depreciated paper the louder was the clamor that the supply of currency was insufficient for the needs of the country. The banks, many of which had the privilege of note issue, vied with the government in the issue of paper and in the profitable speculation in exchange, and, as depreciation more than kept pace with increase in quantity, it was a curious fact that the 297,800,000 milreis in circulation at the close of 1890 was worth more in gold than the 788,364,000 milreis remaining in circulation in 1898.[2]

[1] According to Wileman the average circulation in 1869 was 183,224,767 milreis; 1875, 181,868,699 milreis; 1880, 215,677,818 milreis; 1885, 207,861,450 milreis; 1888, 205,271,302 milreis; and in 1889, 198,815,562 milreis.

[2] *Cf.* Lyon, in *Questions Monétaires Contemporaines*, 795. With

It was recognized almost from the first that the debauch of paper must come to an end, but the government had entered upon a vicious circle which was difficult to break, and its attitude towards the banks and towards its own obligations was not such as to restore confidence. Two banks were founded at about the time of the creation of the republic, with the support of French capitalists,—the National Bank of Brazil and the Bank of the United States of Brazil. They had been in operation but a short time when a decree of President Fonseca in December, 1890, based upon a report by Ruy Barbosa, the Minister of Finance, authorized the union of the two institutions under the name of the Bank of the Republic of the United States of Brazil, with a capital of 200,000,000 milreis. The new bank was authorized to issue notes to three times the amount of its gold reserve, and the charter provided that the government should grant the right of note issue in future to no new banks and that the circulation of existing banks should be remitted to the new establishment as the old ones surrendered their privileges. The existing banks of issue numbered six, with a limit of circulation of 166,000,000 milreis. The new bank undertook the retirement of the government paper money, which had been in circulation for some fifteen years and still amounted in June, 1891, to 168,000,000 milreis.

A new organization was given to the Bank of the United States of Brazil by an Act of December 17, 1892, under the title of the Bank of the Republic of Brazil. The capital was reduced from 190,000,000 milreis to 150,000,000 milreis, the notes were made legal tender, and the bank was pledged to retire 100,000,000 milreis in bills within the year 1893.[1] The circulation of the bank, including interest-bearing bonds, which were made legal tender and receivable at public depositaries, and including the circulation of other bank bills assumed by the consolidated bank, reached 379,390,720 mil-

exchange at 23⅜ in 1890, the gold value of the currency worked out at £28,073,000; at 5¾ in 1898, it worked out at £23,537,000.

[1] *Revue des Banques*, January, 1893, XII., 293.

reis ($205,000,000) and the government paper money reached 200,000,000 milreis ($109,000,000).[1] This was the situation early in 1893, but the suspension of specie payments as the result of a new civil war led to repeated new issues of paper money and a constantly growing premium on gold. The pledge to retire paper money and bank-notes in 1893 was partially kept, only to be followed by new issues larger than those withdrawn.

The difficulties of the government constantly grew worse, because it had not only sanctioned extravagance at home, but had a large gold debt abroad, upon which the charges steadily mounted in currency when converted into gold at current rates of exchange. Annual interest charges of about £4,000,000 when converted at parity in 1889 called for 35,335,000 milreis; when converted at 5¾ pence in 1898 they called for 165,300,000 milreis.[2] Even at home prices of everything bought by the government were rising, and for the enormous deficits of the budget there was no remedy but drastic increase of taxation, national bankruptcy, or a radical change of policy. The latter alternative was finally adopted in 1898, with the negotiation of the Funding Loan with the Rothschilds of London. Under this contract the federal government was allowed to suspend for three years, until June 30, 1901, payment of interest on the foreign debt, and on the interior gold loan of 1879, and the gold railway guarantees. The holders of the coupons of these obligations received gold funding bonds bearing interest at five per cent., which might be issued to an aggregate amount of £10,000,000. These bonds were secured by the customs revenues of Rio de Janeiro. The government agreed to deposit in the three banks of Rio paper money to the amount of new securities issued, at the rate of 18 pence to the milreis, which was to be retired from circulation and destroyed or to be employed in buying drafts on London in favor of the Rothschilds, to constitute a fund for resuming payment of interest on the debt. At the same time the National Bank

[1] Lévy, 282–84.

[2] Lyon, *Questions Monétaires Contemporaines*, 799.

was again reorganized,[1] and provision was made for accumulation of a gold fund in London.[2]

These measures, courageously adhered to by the Brazilian Government, soon began to bear fruit. The year 1899 witnessed the withdrawal of 52,214,605 milreis of depreciated paper and the year 1900, 34,095,434 milreis. The withdrawals were not so large in succeeding years, but the outstanding circulation was reduced on March 31, 1908, to 610,816,013 milreis,[3] within sight of the goal of 600,000,000 milreis fixed by the government. The exchange value of the paper mounted upward, slowly at first, until it attained 9½ pence in June, 1905. Then, under the influence of other reformatory measures contemplated by the government, it suddenly advanced in July to 13 pence and in August to nearly 17 pence. These sudden advances were disturbing to the financial markets, and after a sharp reaction the rate settled between 12 and 15 pence, which came to be treated as approximating the rate at which resumption of specie payments would eventually be accomplished.

The value of the paper money, having once entered firmly upon the upward course, had advanced so rapidly that it was impossible for prices to adjust themselves to the changes. Before the close of August, 1905, when the value of the milreis had touched 17 pence, there was general complaint that prices were no lower in paper than when exchange was at twelve pence or even at eight pence.[4] It was evident that conditions were ripe for further steps. The issue of gold notes at a fixed rate, as in the Argentine, began to be discussed by the financial journals. To accomplish this upon a sound basis the government determined to again revise the statutes of the national bank, now known as the Bank of the Republic. For the first time since 1900 a general meeting of

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[1] Lyon, 801.

[2] *Économiste Européen*, March 11, 1898, XIII., 319.

[3] Presidential message, in *Moniteur des Intérêts Matériels*, June 24, 1908, 2075.

[4] *Économiste Européen*, August 25, 1905, XXVIII., 228.

the shareholders was held on July 29, 1905, and a committee was authorized to confer with the government.[1]

The reorganization of the bank changed the name to the Bank of Brazil and fixed the capital at 70,000,000 milreis, of which 22,250,000 went to the old shareholders, 22,250,000 to the government, and 25,500,000 milreis were offered for public subscription.[2] The bank was given authority to issue checks payable in gold, receivable for customs, and was made the depository of the funds of the Treasury. Señor Bulhoes, the Minister of Finance, declared that the time had come for the intervention of the government in the market for foreign exchange, where gold had ceased to be a standard of value and had become a plaything of speculation.[3] Already on March 31, 1906, the government had to its credit with the Rothschilds in London £6,469,966, and it was estimated that a large credit balance had been created in favor of Brazil by the importation of foreign capital.[4]

The important step was now taken of creating a gold conversion office (*Caixa de Comersao*), which offered to deliver paper for gold at the fixed rate of 15 pence (30 cents) per milreis. Fears were entertained that gold would not be presented and that the new notes, if issued, would not find their way into general circulation. Only the latter of these doubts was partially verified. The banks put the gold notes into their reserves and paid out the old notes, but the latter remained all through the year 1907 substantially at gold par. The Conversion Office was opened on December 26, 1906, and on December 31, 1907, had issued notes to the amount of 113,730,423 milreis and paid out gold for notes to the amount of 13,688,655 milreis, leaving a balance outstanding of 100,041,748 milreis ($30,000,000).[5] The Bank of Brazil in

[1] *Économiste Européen*, September 8, 1905, XXVIII., 317.

[2] *Économiste Européen*, October 6, 1905, XXVIII., 445.

[3] *Le Marché Financier en 1905-06*, 769.

[4] The amount of foreign capital introduced in the three years ending with 1904 was estimated at £7,600,000 and the net balance created by exportations and otherwise at £25,312,139.—*Économiste Européen*, January 12, 1906, XXIX., 37.

[5] *Moniteur des Intérêts Matériels*, June 24, 1908, 2075.

October, 1907, began buying bills for future delivery, against which gold was imported. Net gold imports for the year ending October 31, 1907, were £28,571,950.[1] So vigorous was the policy of the Bank of Brazil that complaints were heard from foreign bankers operating in the country that the old profits on exchange had disappeared and that the government bank conducted its operations not with a view to profit, but entirely as a protection to the interests of the Conversion Office.[2] That it at least accomplished its object was shown by the fact that during 1907 exchange showed a maximum variation of $\frac{1}{32}$ pence, or about 2.7 per cent., while in 1905 the range of variation had been $4\frac{1}{32}$ pence, and in 1906 $3\frac{1}{8}$ pence, or more than twenty per cent.

The law of 1906, establishing the Conversion Office, provided that the issue of gold notes should cease when the amount reached 320,000,000 milreis, corresponding to deposits of £20,000,000, and that a higher rate of exchange for the milreis might then be fixed. The notes might then be called in and new ones issued at the changed rate.[3] As prices and wages become adjusted to a fixed exchange, however, it does not seem likely that an arbitrary variation in the value of the milreis will be found advisable. In the meantime the Brazilian Government arranged for a coinage of subsidiary silver at the rate of ten grams to the milreis, or near the rate of 24 to 1.

Banking in Argentina.

The forced legal tender of paper currency is declared by M. Lévy to have been, "since 1826, a chronic malady, with rare intermissions, in the Argentine Republic."[4] The his-

[1] *U. S. Consular Reports*, Feb. 25, 1908.

[2] London *Economist*, January 18, 1908, LXVI., 126. It was admitted, however, by the Chairman of the London and Brazilian Bank, at their annual meeting in London April 28, 1908, that if the bank "were losers in one way by the privileges enjoyed by their native competitor, they were always gainers by a steady exchange."—*Economist*, May 2, 1908, LXVI., 948.

[3] Arts. 3 and 4, *Moniteur des Intérêts Matériels*, Sept. 23, 1906, 3133.

[4] *Mélanges Financiers*, 286.

tory of the country for the years prior to the crisis of 1890 was the story of unduly expanded credit, discounting too rapidly the possibilities of the future, which was witnessed in the United States in 1837 and 1857 and more recently in Australia. The oldest bank of the Argentine Republic was the Bank of the Province of Buenos Ayres, which was founded as a private bank in 1822, but was purchased by the State in 1826 from the proceeds of an English loan. It was authorized as a state bank to issue circulating notes redeemable in silver. The issues were excessive and had depreciated in 1868 to a value of four cents on the dollar. The bank was then authorized to convert the notes into a new issue and continued in operation until 1891. The Bank of the Nation (*Banco de la Nacion*) was created by the Act of November 5, 1872, limiting the circulation to double the paid-up capital and requiring a cash reserve of at least one-fourth of the outstanding notes. The government subscribed for $2,000,000 of the capital stock, which was fixed at $5,000,000.[1] The bank was given continuance for twenty years and its notes were legal tender.

The banking system which was established in 1887, and which broke down so completely in 1890, was peculiar in the fact that the circulating notes purported to combine the double guarantee of metallic coverture, so dear to the framers of the English Act of 1844, and the coverture by means of evidences of the public debt, which is the basis of the national banking system of the United States. But the gold was borrowed, the issue of evidences of the public debt went beyond legitimate currency requirements and the guarantees proved of no avail against inflation, depreciation, and resulting insolvency. The Bank of the Nation was reorganized under the Guaranteed Banking Act of November 3, 1887. This Act authorized the issue of notes by any provincial bank which complied with the requirement of a deposit of government bonds. A special issue of four and a half per cent. gold bonds was authorized by the general

[1] The Argentine monetary unit was the peso ($.965).

government as the basis of this circulation, and in order to secure the gold required to buy these bonds each of the provinces desiring a provincial bank sold abroad a special issue of its own gold bonds. The gold received was paid into the national Treasury for the national bonds and the banks of the provinces were authorized to issue an amount of paper money equal to the bonds thus purchased. The provinces became responsible for the issue of paper money by the respective provincial banks.[1] A considerable sum of gold was obtained by the sale of bonds, which resulted in a great inflation of the prices of property on which loans were made by the banks.

Bad banking and excessive issues wrecked the new system within four years, and sent gold to 300 per cent. in paper, in spite of the security of the note issues. Every bank of issue suspended in 1891 and is still in process of liquidation. The guaranteed bonds issued to found the system were estimated to be outstanding in 1893 to the amount of $100,082,965.[2] The inflation had been aided by the issue of paper money without special guarantee, but it was the opinion of the executive power that the Guaranteed Banking Act was the cause of the crisis.[3] The government assumed responsibility for the outstanding paper and required the surrender of the bonds and specie held by the banks. It was necessary to have some banking institution to permit the continuance of government finance, and the Bank of the Argentine Nation was erected in December, 1891, upon the ruins of the old Bank of the Nation and of the provincial banks. The bank was opened with a capital of $50,000,000, entirely paid in paper. The affairs of the old national bank were made over to the new bank and its shareholders given a preference in the subscriptions to the new stock. The bank was allowed to issue notes to the amount of seventy-five per cent. of the internal bonds deposited as a guarantee.[4] The

[1] *Comptroller's Report*, 1895, Letter of Minister William I. Buchanan, 596.

[2] London *Bankers' Magazine*, March, 1893, LV., 408–16.

[3] Lévy, 286.

[4] London *Bankers' Magazine*, June, 1892, III., 905.

attempt to sell stock to the public proved a failure and the capital of the bank was furnished exclusively by the Treasury.

Relief from a part of the burden of the external debt and a rectification of the budget were necessary to extricate the country from its difficulties. The first arrangement for these purposes, made under a law of January 23, 1891, providing for a loan in London of £15,000,000 at six per cent., proved too burdensome, and was superseded by a new project in 1893. Under this plan the Argentine Government was permitted to reduce its interest payments for five years to seventy per cent. of the amounts stipulated, but was to make up the amount at a later date.[1] Promises were again made that expenses should be curtailed and every effort put forth to restore order to the public finances. The result of these measures and a large export movement of cereals was to reduce the quotation for gold from 278 in August, 1898, to 206 in December of the same year. While the change was acceptable to the government, to importers, and to those who had invested foreign capital in the country, it called forth loud protests from agriculturists and exporters. Even the Minister of Finance was forced to admit in his report for April, 1900, that "the study of the conversions operated in other countries had persuaded him of the truth of the principle, that if the money of a given country had suffered a great depreciation, which had long been maintained, in such manner that the economic conditions of the country had been radically transformed, it was impossible to return to the old par of exchange."[2]

It was felt that the time had arrived, however, when the government was strong enough to establish a stable exchange. There had been no additions to the paper issues since 1893, and the amount outstanding was about $296,690,000, which at the value of gold at the time of issue represented $156,452,000.[3] Two important laws were accordingly passed in November, 1899—the first providing for the crea-

[1] Lyon, in *Questions Monétaires Contemporaines*, 810.

[2] Lyon, 811.

[3] *Économiste Européen*, November 10, 1899, XVI., 580.

tion of a conversion fund for the exchange of notes for gold, the second placing certain resources at the command of the Bank of the Nation to aid in carrying out the reform.[1] It was declared flatly in the first of these laws that "the nation will convert the total amount of bills in circulation into gold at the rate of forty-four gold centavos to the paper peso." The executive was authorized to give three months' notice of the date and manner of the conversion. The conversion fund was to be constituted from five per cent. of the additional duties on imports; the profits of the Bank of the Nation; the produce of the sale of the Andine and Toma Railways, and some other special funds.

The Bank of the Nation was made the depository of all these funds as they became available and was to employ them only in exchange operations. It was also to receive deposits of gold at the legal rate and to issue certificates therefor redeemable in gold. Public dues might be paid indifferently in gold or paper at the legal rate. The government took off the hands of the Bank of the Nation $15,873,700 in bonds of the interior loan of 1891 at the rate of 75 per cent. of par. President Rocca, in his message to Congress in May, 1900, was able to announce that the conversion fund had already reached $3,200,000, that exchange had become practically fixed, and that the adoption of the rate of 44 centavos on the eve of a large crop had protected the farming and grazing interests from a heavy loss which they would have suffered if exchange had continued to appreciate. He announced at the same time that $139,260,366 in gold, representing the obligations of the guaranteed banks assumed by the government, had been destroyed within the year as having no further value.[2]

From the opening of the Conversion Office, there was found no difficulty in maintaining fixity of exchange. Gold was imported almost regularly from England, in order to enlarge the circulation of gold notes, to pay for large exports of wool and other Argentine products. Already in the summer of

[1] *Économiste Européen*, December 8, 1899, XVI., 709.

[2] *Ibid.*, June 29, 1900, XVII., 829.

1906 the country was so well supplied with gold that the question was being discussed whether further credits in London might not well be kept there as an exchange fund instead of shipped in metal to Buenos-Aires.[1] President Alcosta, in his annual message of May 11, 1908, announced that on December 31, 1907, the amount of gold in the Conversion Office was $129,530,000 and the funds in the custody of the bank were $22,000,000, making together an amount equivalent to £30,308,000. Outstanding against this were paper issues of the face value of $587,666,000, or about £51,714,000; so that the metallic reserve was fifty-nine per cent. of the notes. In spite of the stress in Europe and America, the banks of Buenos-Aires had been able to increase their deposits within the year from $754,000,000 to $783,000,000 and their cash reserves from $257,000,000 to $311,000,000.[2]

Such was the expansion of business under the influence of stable exchange that foreign capital showed a disposition to enter the country in large amounts. In Southeastern America it was estimated that £65,000,000 of German capital was invested at the end of 1904, and nearly every foreign bank, of which there were British, German, Spanish, and Italian, increased its capital within a few years.[3] Seventeen of these institutions were in operation in 1908. So potent was their influence in the money market that the Bank of the Nation felt compelled to ask an increase of its capital to $100,000,000, in order to increase its branches and to have sufficient resources to regulate the money market by rediscounting for the private banks.[4] The authority was granted and the new capital was raised on behalf of the nation by the sale of obligations of the National Hypothecary Bank and the issue of internal bonds.[5] The bank had 104 branches at the close of 1907, and its accounts in paper (in addition to

[1] *Vide* London *Statist*, Sept. 22, 1906, LVIII., 486.
[2] *Moniteur des Intérêts Matériels*, May 17, 1908, 1634.
[3] London *Financial News*, December 27, 1905.
[4] London *Economist*, April 6, 1907, LXIV., 583.
[5] *Ibid.*, October 12, 1907, LXV., 1728.

small amounts in gold) showed the following progression[1]:

Accounts of the Bank of the Argentine Nation.

DEC. 31.	DEPOSITS.	DISCOUNTS AND ADVANCES.	CASH.
1892	$ 36,125,700	$ 32,468,900	$16,888,000
1896	55,800,900	66,380,800	36,805,000
1900	75,426,700	83,065,900	44,190,900
1905	145,909,900	161,522,700	51,257,000
1907	162,276,600	214,022,200	55,057,400

The Banks of Chile.

Chile has been in recent years under the domination of government paper money and legal tender bank-notes, in spite of the comparative wealth and prosperity of the republic among other South American countries. Free banking existed in Chile up to 1839, when a law was passed forbidding the creation of banks of issue without the authority of the governor of the municipality or department where they were established. A general reform of the banking system was made by the law of July 23, 1860, under the inspiration of M. Courcelle-Seneuil.[2] This law limited the maximum circulation to one and one-half times the capital of the banks and provided that the notes should be redeemable in specie, and in case of default should constitute a judgment (*titres exécutoires*) against the goods and persons of the proprietors. The issue of the notes was placed under the supervision of the public authorities by requiring the signature and seal of the superintendent of the mint. Shareholders were liable only for the amount of their shares, loans to officers and directors were required to be specially recorded, and the books and cash were to be open to government inspection.[3] These regulations are still in force, but the readjustment of the monetary standard has led to some recent changes in the provisions governing the circulation.

[1] *Bulletin of the Bureau of American Republics*, March, 1908, XXVI., 514.

[2] Lévy, 291.

[3] *Comptroller's Report, 1895*, Letter of Minister Edward H. Strobel, 68.

The suspension of specie payments in Chile was decreed in 1865, but was brought to an end on August 31, 1866. The specie basis was again abandoned and forced legal tender decreed by a law of July 25, 1878, which fixed the maximum circulation at 15,000,000 piasters ($13,600,000), divided among eleven banks which subscribed to a new loan. The government resorted to legal-tender paper, issued directly by the Treasury, during the war with Peru, and the amount had risen, on January 5, 1881, to 40,000,000 piasters. The banks, at the outbreak of the revolution against President Balmaceda in 1891, had a circulation of about 15,000,000 piasters, upon a capital of 30,000,000 piasters and a reserve of 6,000,000. The circulation increased after the fall of Balmaceda to 20,000,000 piasters, and the government paper money increased to 42,000,000 piasters. The Junta established at Iquique during the civil war proclaimed liberty of note issues, and the Bank of Tarapaca, the railway companies, the municipality of Iquique, the principal corporations and business houses, and even retail tradesmen, issued their own notes. The notes were not legal tender and the public accepted those they regarded as good and rejected those they regarded as bad, but the return of civil order was followed by the redemption of the paper in nearly every case. The government made an unsuccessful effort to restore specie payments in 1892, by means of a bond issue and an adjustment of the standard to meet the depreciation of the paper money. The paper continued at a heavy discount and a new law was pushed through Congress early in 1895, still further reducing the standard. The "dollar" was made the monetary unit, but was reduced to one-thirteenth part of a pound sterling or about 36.49 cents in United States gold coin. Gold was made the monetary standard and was to be paid out for paper, beginning June 1, 1895. Resumption was begun under these requirements, but the exchanges proved unfavorable and gold was largely exported.

The law of 1895 put a limit of 24,000,000 dollars ($9,000,000) upon bank-note issues until December 31, 1897, apportioned to the paid-up capital of the banks, and provided that

the notes should be guaranteed to their full amount by deposits in the public treasury of gold, government notes, municipal bonds, treasury bills, or bonds of mortgage banks. These notes were made receivable in payment of taxes until December 31, 1897. The notes constituted a first lien on the assets and in case of failure the securities in the Treasury were to be sold for the benefit of the note-holders.[1]

The bank currency system and the gold standard were wrecked completely in 1898 by the threat of war with the Argentine Republic. The causes of the crash lay deeper, in the lack of adaptability of the means adopted for maintaining stable exchange and in the bond-secured note system, but it was the rumors of war and other disturbances which caused the tottering structure to fall. The President of the Republic, in his annual message of June 1, 1898, had vaunted the existence of a gold fund sufficient to cover a paper issue of 57,000,000 piasters and had even promised to present a bill for the employment of the surplus of the conversion fund.[2] On July 5th the growing exports of gold and the refusal of the Bank of Chile to honor gold drafts caused a run upon the banks at Santiago for the withdrawal of deposits, which compelled general suspension of gold payments. A *moratorium* of thirty days was granted by the government and a bill was quickly put through Congress (on July 30th) restoring the régime of irredeemable paper.

The amount of paper authorized was 50,000,000 piasters ($18,000,000), and it was solemnly voted that the notes should be redeemed at the rate of eighteen pence at the end of three years. The notes were to be legal tender, but were to be deposited with the banks, which had seen practically their entire circulation melt away in the demand for its reimbursement.[3] Customs duties were to be paid in gold or gold exchange. The curious policy was adopted of selling for paper the gold thus received, which had the effect

[1] *Bulletin of the Bureau of American Republics*, April, 1895, 670–74.

[2] *Économiste Européen*, September 30, 1898, XIV., 421.

[3] *Marché Financier en 1898–99*, 695.

of carrying the gold premium to 45 per cent. by August 15th. The paper fever once in the blood, the monetary history of Chile for the next ten years was a record of constant new infusions of the drug as the effect of the earlier ones became deadened. The first issue of 50,000,000 piasters was supplemented in 1905 by a further issue of 30,000,000 piasters; in the spring of 1906 by an issue of 40,000,000 piasters[1]; and by a law of September 12, 1907, by a still further issue of 30,000,000 piasters, which carried total issues to 150,000,000.[2] Ultimate conversion into gold was appropriately postponed, by the law of December 29, 1904, to the beginning of the year 1910.[3]

During all these vicissitudes the government struggled to accumulate gold funds with a view to ultimate resumption, and for several years prior to the crisis of 1907 exchange was kept within comparatively narrow limits of fluctuation. In 1904 the maximum was 17 pence and the minimum 16; in 1905, the maximum was 15¾ and the year closed with a rate of 14⅞ pence. The year 1906, the earthquake year, saw the minimum below 14 pence, and the crisis of 1907 carried quotations down sharply, from 12¼ pence on October 1st to 8½ pence on December 3d.[4] Even at this time, however, government four and a half per cent. bonds, on which the interest was payable abroad in gold, receded only from 92 in September to 87 in December, and the government did not abandon its purpose to accumulate sufficient gold to restore the notes to their legal parity of 18 pence. The law of September 12, 1907, authorized a gold loan of £4,500,000, and it was calculated that the Treasury already had gold funds in the custody of European banks and at home to the amount of 78,420,160 piasters at the legal parity.[5] The limit of paper issues was officially fixed at 150,000,000 pesos, and by a law of December 9, 1907, provision was made for a sub-

[1] *Report of the Director of the Mint, 1907*, 222.
[2] *Marché Financier en 1907–08*, 732.
[3] *Économiste Européen*, August 25, 1905, XXVIII., 253.
[4] London *Economist*, December 14, 1907, LXV., 2172.
[5] *Marché Financier en 1907–08*, 733.

sidiary silver coinage. The system of Brazil and the Argentine was adopted, of issuing paper upon deposits of gold at the legal rate of 18 pence.

Chile did not fail to make considerable economic progress in spite of the régime of paper money. The incidents of this progress, however, were such as usually mark a period of inflation and over-speculation. During the six years ending with 1906, joint-stock companies were organized to the number of 438, with subscribed capital of 151,949,296 piasters, and of these more than 84 per cent. were organized in the last three years of the period.[1] The banks, deprived of their circulation by the flood of government paper, nevertheless showed assets on December 31, 1907, amounting to 811,363,263 piasters. Capital amounted to 124,040,525 and deposits to 415,205,924 piasters.[2]

Banking in Uruguay.

Uruguay has remained for many years upon the gold basis, with the peso as the unit, worth $1.034 in United States gold. An old issue of government paper money was withdrawn in 1892, and the country was for a time under the régime of free banking. Neither this system nor the various efforts to establish government banks were entirely successful down to the latter part of the nineteenth century, but conditions during the past decade have been more favorable.

The law of March 23, 1865, prescribed uniform rules for the government of banks of issue. One of these rules fixed the circulation at three times the capital, but this was restricted in 1870 to twice the capital actually paid up.[3] The private banks in 1893 renounced the right of circulation, and it was decided to authorize no additional banks of issue. This decision was due to the failure of the National Bank, which went out of active existence in 1893. It was soon

[1] Report of A. A. Winslow, *U. S. Consular Reports*, October 11, 1907, 17.

[2] *Bulletin of the Comptroller of the Currency*, June 22, 1908, 10.

[3] Lévy, 281.

felt, however, that a central bank was a necessary adjunct of a sound monetary system, and the Bank of the Republic, with a capital of $10,000,000, was constituted in 1896 from the proceeds of a loan in London. The new institution was authorized to issue gold notes to double the amount of its capital, in denominations of $10 and upwards, and notes to the amount of half its capital payable in gold or silver at the option of the bank, in denominations below $10.[1] The two institutions which had survived the troubles of 1893 and 1894 were the London and River Plate Bank and the Italian Bank of the River Plate. The English bank was ordered in the autumn of 1896 to withdraw its note issues in six months, in order to leave the field clear to the Bank of the Republic. The circulation of the bank at the time was about $3,000,000 and of the Italian bank about $850,000.[2]

The authority to issue notes payable in silver was the cause of some disturbance of confidence in 1898. The difficulty was due largely, however, to the over-issue of subsidiary coins by the government in order to profit by the seigniorage. The bank had in circulation on August 31, 1898, small notes to the amount of $1,704,139.[3] It was demanded by the Chamber of Commerce of Montevideo that the proportion be reduced, and a run was made upon the bank on September 6th for the redemption of the notes. It was shown by experience, however, that the notes were preferred to coin and that the real cause of the trouble lay elsewhere than with the bank.[4] The gold standard has since

[1] *Économiste Européen*, December 19, 1896, X., 800.

[2] New York *Bankers' Magazine*, February, 1897, LIV., 216. The London and River Plate Bank did business in other countries and in the troubles of 1894 carried cash to the large amount of £6,037,411, which was a more effective resource, in the opinion of the chairman of the board of directors, than any form of securities, and had much to do with enabling the bank to weather the storm of the crisis in Argentina, Uruguay, and Paraguay, which swept away so many other banking institutions.—London *Bankers' Magazine*, January, 1895, LIX., 98.

[3] *Économiste Européen*, November 4, 1898, XIV., 581.

[4] *Ibid.*, November 23, 1898, XIV., 677.

been maintained and the Bank of the Republic had shown a favorable balance sheet. The government was able to set aside $1,000,000 from surplus receipts in 1907 for the purpose of increasing the capital of the bank and permitting expansion of the note issue. Profits for the year were $728,242, of which the government as sole owner received eighty per cent., or $592,594. This was more than sufficient to pay the interest on the English loan, which was $470,000.[1] The circulation of the Bank of the Republic at the close of 1906 was $8,331,340 in gold and $2,598,937 in silver. The circulation of the Italian Bank was $3,309,280.[2]

Banking in Paraguay.

Banking in Paraguay has been in a somewhat chaotic state since the collapse of credit in the Argentine Republic, of which the country is a near neighbor. The circulation was issued for many years by the National Bank of Paraguay, in which the government was a large shareholder. The gold unit of value, prior to the suspension of specie payments, was the English pound sterling, and five paper dollars were paid for £1 in gold. The suspension of the National Bank of the Argentine Republic on January 1, 1885, was not followed at once by suspension in Paraguay, but later in the year gold went to a premium of fifty per cent. The National Bank had the option of redeeming in gold or silver, and redeemed in silver until 1889, when the Bank of Paraguay and the River Plate was founded, redeeming its notes exclusively in silver. Both banks were subjected to a severe run in 1890, their silver reserves were reduced, and gold went to 300 per cent. in paper. The National Bank suspended the payment of its obligations and announced that it would be compelled to grant an extension to its customers, many of whom were land owners of large means, but unable to meet their immediate obligations.

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[1] *Bulletin of the Bureau of American Republics*, July, 1908, XXVII., 214.

[2] *Report of the Director of the Mint, 1907*, 268.

The bank was granted by law a ten years' extension of time within which to collect its credits and settle its debts, and debtors were expected to pay their indebtedness in quarterly instalments during the ten years. The money had originally been borrowed upon a specie basis, but was to be paid back in paper. Even these payments were not made, and in August, 1894, the bank agreed to accept fifty per cent. of the amounts due. Many debtors paid under this condition, but the demand for money drove up the interest rates so sharply that others were prevented from making payment within the three months allowed.[1] The affairs of the bank were put in process of liquidation through a syndicate.

The Bank of Paraguay and the River Plate (*Banco Paraguay y de la Plata*) was founded with a capital of $8,000,000 in Paraguayan money, worth at the time of its foundation in 1889 about 66⅔ cents to the dollar in gold, but now worth about ten cents. The government subscribed one-quarter of the capital through a bond for £400,000 negotiated at six per cent., and receives five per cent. of the profits of the Bank of Paraguay in compensation for the privileges of the charter. Exchange fluctuated violently during the revolution of 1904, the rate for $100 in gold advancing from $875 in paper at the beginning of the year to $1400 on November 17th, three months after the outbreak of the revolution. Two days after the ratification of peace (December 8, 1904) the rate dropped to 1040.[2]

An effort was made in 1907 to restore sound conditions by the creation of a new state bank with an authorized capital of $20,000,000 gold, of which $6,000,000 was to be issued at once, one-third being subscribed by the government. The bank was accorded by the law of December 24, 1907, most of the privileges of a central bank of issue. The note issue was required to be covered by gold to the amount of one-third. The rate of conversion for the paper, which amounted

[1] Letter of Vice-Consul Eben M. Flagg, *Comptroller's Report, 1895*, 92.

[2] Report of U. S. Vice-Consul de Korab, *Consular Reports*, June 13, 1905, 15.

nominally to about $35,000,000, was fixed at ten per cent. of the legal parity. The bank was required to redeem in gold amounts up to $100 gold, but for larger amounts might issue sight drafts on exchange funds abroad.[1] It was calculated that the entire burden of the depreciated paper could be gotten rid of in eight or ten years. The duration of the privilege of the bank was fixed at fifty years. It was required to pay ten per cent. of its profits to the government, and this income and that from the export duty on hides were to be set aside for retiring the government paper money.[2]

The Monetary System of Peru.

Peru, after passing through various vicissitudes with government notes and bank paper, converted outstanding paper issues in 1887 into funded debt and has since authorized no banks of issue and has had only metallic money in circulation.[3] Her monetary history in recent years is interesting, however, because she was among the pioneers in putting in effect a currency system which frankly recognized the depreciation of silver and conformed in some respects to the gold-exchange standard. The coinage of gold was suspended December 30, 1872, and the country was for a quarter of a century on the silver standard. The disturbing effects of the fall in silver led to the closing of the mints to free coinage by a law of April 9, 1897, and preparations to return to the gold standard.

The new standard created a unit known as the libra, corresponding in weight and value to the English pound sterling. The sole, the old silver unit, was to be made worth 24 pence, or one-tenth part of the libra. The excess of soles was reduced by converting 2,000,000 of them into

[1] London *Economist*, April 11, 1908, LXVI., 780.

[2] London *Bankers' Magazine*, March, 1908, LXXXV., 442.

[3] *Report of the Director of the United States Mint, 1900*, 431. All the reports here quoted in regard to Peru were made by Irving B. Dudley, United States Minister to Peru, and are among the most intelligent and comprehensive made to the Department of State for the use of the Mint.

bar silver and selling it at a favorable moment for gold. The banks agreed to exchange gold and silver coins at par, and during the year 1900 exchange on London advanced gradually to 24 13/16 pence and closed at 24 5/8 pence.[1] The sole, although containing twenty-five grams of silver, nine-tenths fine, like the French 5-franc piece, was rated under the new system at only about half its original gold value, or at the ratio to gold of about 31 to 1. This led to some difficulties when silver bullion rose in 1906 to 33 pence per ounce. At this rate, even with allowance for the usual costs of export, there was a profit of about four and a half per cent. in exporting the silver coins.

The silver coins began to disappear and for a few days in the commercial centres were parted with only at a premium. The banks discouraged such discrimination by paying out silver freely and the government adopted several transitory measures as a prelude to more serious ones if the rise in silver should not be checked. The export of silver coins was prohibited, their melting into bullion was forbidden, and provision was made for a gold coin of one-fifth of a libra. The reduction of the weight and fineness of the sole was under consideration, but was rendered unnecessary by the reaction in the price of silver bullion which soon set in.[2] The shrinkage in the silver circulation was compensated by a special coinage of 1,500,000 soles ($750,000). Gold is brought regularly to the mint for coinage, and exchange rates on Europe and the United States move within narrow limits, determined by the demand and supply of bills.[3]

The Banks of the Northern States.

Banking in Venezuela is governed by the law of May 7, 1895, which permits the creation of banks of issue under fixed conditions. The notes are not legal tender and can be issued to the amount of no more than fifty per cent. of the

[1] *Report of the Director of the Mint, 1901*, 344.
[2] *Ibid., 1906*, 239.
[3] *Ibid., 1907*, 256.

paid-up capital. The banks are required to redeem their notes in lawful money on demand, at the central office and the branches. Twenty-five per cent. of the capital of a proposed new bank is required to be held as a cash reserve. The banks of issue are forbidden to loan on their own shares or to make loans which will lock up their capital for over six months. Balance sheets must be published quarterly, showing, among other things, the loans to directors and officers, and changes in the by-laws must be promptly communicated to the government. The national executive is empowered to appoint an inspector for each bank with power to examine books and cash.[1]

The government in 1896 ceased the issue of paper money and the premium on gold is small.[2] There are three banks of issue—The Bank of Venezuela, with a capital of 12,000,000 bolivars ($2,400,000), and circulation on June 30, 1907, of 1,976,550 bolivars; the Bank of Caracas, with a capital of 6,000,000 and circulation of 786,208 bolivars; and the Bank of Maracaibo, with a capital of 1,250,000 and circulation of 1,430,370 bolivars.[3]

In Colombia there are several banks of issue, but their notes have played but a small part in the circulation because of the excessive issues of government paper. These issues are estimated at 10,000,000,000 pesos, but their depreciation was such that the value of the paper peso was finally fixed officially at one centavo, or one per cent. of original nominal value.[4] Within a few years efforts have been made to restore a stable metallic standard By decree of March 6, 1905, the Central Bank was established, with a capital of $8,000,000. The bank is authorized to issue notes to double the amount of its capital, and must hold against them a reserve in gold or legal Colombian coin in the proportion of thirty per cent. The government has consecrated certain

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[1] *Gaceta Official*, May 10, 1895, *Ley de Bancos.*

[2] Muhleman, 159.

[3] *Statesman's Year Book*, *1908*, 1634.

[4] *Report of the Director of the Mint*, *1907*, 223.

revenues to the restoration of a metallic basis and by a law of June 12, 1907, provided for a new gold unit equal to the fifth part of the pound sterling. A new bank of issue was authorized in 1907 at Cartagena, to be known as the *Banco de Bolivar*, with a capital of $500,000 and authority to issue notes to the amount of $1,000,000.[1]

The secession of Panama from Colombia in 1904 left the new state to devise her own monetary system and banking laws. The serious task assumed by the United States in the construction of the Panama Canal made it of interest to that country that a sound currency system should be in operation in the Canal Zone, and it was proposed by the American Secretary of War that the money of Panama should be used if the system of the new republic should be put on a stable basis. This was agreed upon at several conferences held at the War Department in Washington between representatives of the United States and of the Government of Panama, in June, 1904, and the measure there outlined was perfected and enacted by the Panama Government on June 28, 1904.[2] By this agreement the gold currency of the United States was made legal tender in Panama and the money of Panama was made legal tender in the Canal Zone, under the authority of the United States.

The silver unit adopted by Panama was the balboa of 25 grams (about 385.8 grains), nine-tenths fine, and its value was fixed at fifty cents in American gold. This value was to be maintained by limiting the quantity of coins and providing an exchange fund in New York, as under the Philippine system. The amount of new coin was fixed provisionally at $1,500,000 (gold value), with authority for an additional issue up to $1,500,000, if found necessary by the Canal Commission. Provision was made for calling in

[1] *Bulletin of the Bureau of American Republics*, October, 1907, XXV., 855.

[2] The documentary history of these transactions is contained in the *Report of the Commission on International Exchange, 1904*, 313–33. The present writer represented the Commission, by invitation of the Secretary of War.

old Colombian silver coins and for the co-operation of the two governments by the sale of drafts at reasonable rates in order to maintain parity.[1] Banking was done, prior to the American occupation, by the larger commercial houses, but a branch of the International Banking Corporation of New York was established in 1904, and such branches existed in 1908 at Colon, Panama, and Empire.

Ecuador has two banks of issue—the Bank of Ecuador and the Bank of Commerce and Agriculture. The capital of the Bank of Ecuador, which was established in 1867 at Guayaquil, has been increased from time to time, until in 1907 it was 3,000,000 sucres ($1,500,000). The other institution has a capital of 5,000,000 sucres ($2,500,000). The banking law requires reserves to be kept to the amount of one-third of the circulation, at least one-half of such reserves to be in gold. In fact, practically the whole of the reserve is now kept in gold, the amount of gold held against outstanding notes at the close of 1906 having been 4,198,611 sucres and the note circulation 8,043,454 sucres.[2]

The monetary system of Ecuador is substantially the same as that of Peru—a gold standard, with a coin known as the condor as the unit, of the same value as the English pound sterling, and with a large use of silver coins issued at near the ratio of 31 to 1. The silver unit, known as the sucre, from a former President of the Republic, is of the weight of the French 5-franc piece (25 grams), but is worth in gold only one-tenth of the pound sterling ($0.486). The law establishing this system was enacted in 1898 and took effect in 1900. Full provision was made for the exchange and exportation of surplus silver of old types and of foreign coins.[3] Bank-notes convertible into gold form the bulk of the actual circulation.

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[1] An agreement to prevent excessive charges for exchange was made between the Canal Commission and the local bankers, April 29, 1905.—*Hearings before the Finance Committee of the United States Senate*, 36.

[2] *Statesman's Year Book, 1908*, 910.

[3] *Report of the Director of the Mint, 1900*, 332.

Bolivia has five banks of issue and branches of several foreign exchange banks. The country is on the silver basis, the unit being the boliviano, which is the equivalent of the five-franc piece in size, but fluctuates with the value of silver bullion.[1] A law of September 14, 1906, provides for a gold standard with a unit called the peso, equal to one-fifth of the pound sterling. The legal-tender power of silver will be limited to ten pesos. The banks now redeem their notes in silver. The National Bank, located at Sucre, has a capital of 5,000,000 bolivianos and a circulation of about 4,200,000 bolivianos. The *Banco Francisco Argandona*, founded in 1893, had a capital in 1906 of 2,500,000 bolivianos and circulation of about 3,500,000 bolivianos. The Industrial Bank has a capital of 2,500,000 and circulation of 1,700,000 bolivianos. The Agricultural Bank has a capital of 1,700,000 and the Mercantile Bank a capital of 800,000 bolivianos.[2]

Banking in Cuba and Porto Rico.

The Spanish Bank of Cuba long provided the circulation for that island. The bank was seriously crippled by the policy of the Spanish Government during the insurrections, in compelling the bank to issue notes for the benefit of the state. These notes were not redeemable, and after the American occupation passed out of circulation. So disturbing was the effect upon public confidence that no bank-notes are now issued in Cuba, although the new National Bank of Cuba has the power of issue under its charter. The Spanish Bank, with an original capital of 8,000,000 piasters ($7,400,000), has withdrawn its branches from the provinces and does business only in Havana. The National Bank, while not clothed with monopoly powers, has fourteen branches and does a large share of the business with the United States. It was organized in 1901, and in 1908 had a capital of $5,000,000 in United States currency and deposits

[1] Muhleman, 157.

[2] *Bulletin of the Bureau of American Republics*, XXV., 808.

of about $14,000,000.[1] The Bank of Havana has a capital of $2,500,000, and there are branches of two Canadian banks in the island.

The monetary system of Cuba is peculiar in that the commercial community has adhered to the Spanish gold standard, while small transactions are carried on in Spanish silver at its current exchange value. When Spain went upon the paper basis the Cuban bankers and merchants refused to follow. An adequate supply of gold was kept in Cuba by the curious device of rating Spanish gold coins at the custom-house and in financial transactions at about six per cent. above their actual value at the old legal parity with silver—that is, five pesetas in gold, originally equivalent to one peso, were rated at about $1.06. The fact that this arbitrary enhancement of valuation would be lost by exportation tended to keep the gold coins in the island. The silver coins in use, however, were those of Spain, instead of having a distinctive character as in Porto Rico and the Philippines. They fluctuated substantially with the course of Spanish paper, which, after the war with the United States was over, was above the bullion value of the coins. As Spanish exchange improved in 1905 and 1906, there was a tendency to export the silver coins to Spain, which for a time threatened to almost denude the island of its subsidiary currency.[2] United States currency has come into use in Santiago and to some extent in other parts of the island.

Porto Rico under Spanish authority possessed a bank of issue, known as the Spanish Bank of Porto Rico, founded in 1891, with a circulation of about 1,500,000 piasters. Its charter was similar in its provisions to that of the Bank

[1] *Vide* article by the President of the bank, Edmund G. Vaughn, in *New York Commercial*, January 7, 1908.

[2] *Cf.* Pepper, *Report on Trade Conditions in Cuba, 1906*, 32–34. The present writer, in the spring of 1907, suggested the adoption in Cuba of a local silver currency kept at gold par and the exportation of the Spanish silver by exchange operations at the profit of the Cuban Treasury, but the Provisional Governor, in an elaborate letter to the War Department in August, 1907, refused to approve the suggestion.

of Spain and allowed the issue of notes to three times the amount of the capital. This privilege was not impaired when the Congress of the United States authorized the bank to change its name to Bank of Porto Rico and convert its capital into United States currency, which was made the currency of the islands.[1] The capital of the bank was then fixed at $750,000, and the actual circulation does not exceed this amount. The assets of the bank on June 30, 1907, were $2,671,327, but were exceeded by those of the Colonial Bank of Porto Rico, which were $3,831,582.[2] The total resources of all Porto Rican banks in 1908 were $10,417,624, of which $5,940,587 was due depositors.

Banking in Central America.

Costa Rica had from 1884 to 1902 only one bank of issue, founded as the Bank of the Union. Under a contract made by the government in 1884, the bank changed its name to Bank of Costa Rica, and was given the right to issue notes to double the amount of its capital against a coin reserve of twenty-five per cent. The contract did not specify whether the reserve should be of gold or silver, but the bank, by paying silver and making no effort to sustain exchange, permitted the monetary system to descend gradually to the silver basis. The government took measures in 1896 to return to the gold basis, and finally in 1900 persuaded the bank, which had so grossly abused its trust, to renounce its monopoly of note issue.[3] The country now has three banks of issue,—the Bank of Costa Rica, with a capital of 2,000,000 colons ($900,000); the Anglo-Costa Rican Bank, 1,200,000 colons; and the Commercial Bank of Costa Rica, 1,000,000 colons. These banks are required to hold a reserve equal to fifty per cent. of circulation. The notes outstanding on March 31, 1907, were for the Bank of Costa Rica, 1,994,000 colons; the Anglo-Costa Rican Bank, 1,200,000 colons; and the Commercial Bank, 1,000,000 colons

[1] Public Resolution No. 32, approved June 6, 1900.

[2] *Report of the Comptroller of the Currency, 1907*, 420.

[3] *Le Marché Financier en 1902–03*, 984.

The metallic circulation of the country consisted chiefly of gold after the adoption of the gold standard in 1896, and more than one quarter in United States gold coin.[1]

Semi-annual reports are required of banks of issue in Guatemala and the government designates experts to make periodical examinations of their books.[2] A cash reserve of fifty to sixty per cent. was required to be held against notes, but this requirement was generally ignored and the circulating medium came to consist entirely of bank paper and nickel coins. The issue of uncovered notes was further dealt with by a decree of June 25, 1903, which required that future issues should be covered by gold and silver in the proportion of ten per cent. for the first year; twenty per cent. for the second year; and thirty per cent. for the third year.[3] Even this law has not been fully carried out and the value of the paper peso has fallen to about ten per cent. of its old legal value. The estimated amount of such paper at the close of 1906 was 43,908,000 pesos, of which the gold value was about $4,400,000.[4] The number of banks issuing notes is six,—the International Bank, the Columbian Bank, the Commercial Bank, the Bank of Guatemala, the Bank of the Occident, and the American Bank.

The monetary system of Nicaragua is governed by the law of March 20, 1912, establishing the gold standard, with a unit known as the "córdoba," of the exact weight and value of the American gold dollar. The actual circulation consists of the notes of the National Bank of Nicaragua and of silver coins, both of which are kept at par with gold by the maintenance of a reserve fund of forty per cent. in New York. The country was from 1893 to 1912 under the régime of government paper, which declined from a value of about fifty cents in 1893 to five or six cents in 1911.[5] The rate of

[1] *Statesman's Year Book, 1908*, 883.

[2] *Report of the Comptroller of the Currency, 1895*, 85.

[3] *Statesman's Year Book, 1908*, 1144.

[4] *Report of the Director of the Mint, 1907*, 239.

[5] Vide *Plan of Monetary Reform for Nicaragua*, submitted to Messrs. Brown Brothers & Co. and Messrs. J. & W. Seligman & Co., by F. C. Harrison and Charles A. Conant, April 23, 1912.

conversion fixed by the bank and the government under authority of the law of 1912 was twelve and a half córdobas to one peso, which was made effective in March, 1913. The circulation of the National Bank of Nicaragua on May 31, 1914, was about 1,800,000 córdobas.

The Republic of Salvador contains three banks of issue, with special charters granted by the government, under the provisions of a general law. The banks are allowed to issue notes to the amount of twice their subscribed capital, but are required to hold forty per cent. of the amount of the circulation in silver coin. The outstanding issues are about 4,000,000 pesos and cash resources are 1,600,000 pesos in silver.[1]

Honduras has a single bank of issue,—the Bank of Honduras. The country is on the silver basis, and the bank notes are redeemed in silver pesos. The amount in circulation at the close of 1906 was $537,715.[2]

Haiti and Santo Domingo.

"The exclusive privilege of issuing bills to bearer, payable in specie on presentation," was conferred on the National Bank of Haiti by the decree of the National Assembly of April 1, 1880. The Bank was founded by French capitalists, with a capital of 10,000,000 francs ($2,000,000), and its privileges were conferred for fifty years. The charter required the coin reserve to equal at least one-third of the circulation and made the notes legal tender throughout the republic. The founders of the bank secured from the government a pledge to adopt a national currency and this was done by making the gourde the unit (equal to five French francs) and providing for gold and silver coinage at the Paris mint. The government went further and violated the privileges of the bank by issuing a national paper currency, amounting to 1,000,000 gourdes in 1884, and eventually to 6,200,000 gourdes.[3] The amount has been somewhat reduced, but has in the meantime deranged the financial sys-

[1] Muhleman, 160.

[2] *Report of the Director of the Mint, 1907*, 242.

[3] *Comptroller's Report*, 1895, Letter of Minister John B. Ferris, 86.

tem and substantially deprived the bank of the power of issuing its own notes. The bank was required by a law of September 29, 1892, to issue notes of one and two gourdes on account of the government.[1]

An effort, made in 1895, to establish the gold standard, proved abortive, but for several years prior to 1907 the government succeeded in reducing somewhat the mass of outstanding paper. The total, which had exceeded 11,000,000 gourdes, was reduced on January 1, 1907, to 7,825,248, and exchange fell from 506 per cent. in January, 1906, to 367½ per cent. The partial failure of the coffee crop made it impossible to persevere in this course. The collection of customs duties in gold, under a law passed in 1907, checked importations of merchandise, but was not beneficial to Haitian industry as a whole.[2] The National Bank manages the debt, and is exempt from taxation upon its property and notes. None of its own notes has been in circulation during the paper-money régime, but the bank has done a considerable discount business through several branches. The head office is at Paris.

Santo Domingo had a National Bank which fell upon evil days after the unsuccessful attempt to introduce and maintain the gold standard in 1894. The bank has gone out of existence, and the bank-notes have been deprived of legal-tender quality and no longer circulate. The amount outstanding at the close of 1906 was estimated to represent in gold value $192,195.[3] In 1897 the dollar of the United States was adopted as the monetary unit, and since the convention with the United States in 1905 for the management of the finances American currency has been generally used.[4]

Banking in British Dependencies.

The bank-note circulation of the British West Indies and of British Guiana is provided chiefly by the Colonial Bank,

[1] Lévy, 274.

[2] Report of J. B. Terres, *U. S. Consular Reports*, June 28, 1907, 4.

[3] *Report of the Director of the Mint, 1907*, 261.

[4] Muhleman, 161.

with headquarters in London and branches in the many British dependencies in the West Indies and the Caribbean Sea. The bank was created by a Royal Charter in 1836, continued by an Imperial Act of 1856. The paid-up capital is £600,000. The notes of the bank circulate in competition with many different kinds of gold and of token currency, British, American, Mexican, Spanish, and South American, according to the trade relations of the islands where the branches of the bank are established. The need for currency, even in primitive communities, was illustrated by a curious experiment which was carried out in 1844 by the Governor of the Falkland Islands, off the coast of Patagonia, which at once supplied the absence of a circulating medium and afforded a forerunner of the system of maintaining paper by foreign exchange. A temporary paper currency was issued, the notes being described by the governor as "of the most primitive character, written by hand at some trouble; they are signed by myself, 'on the part of the Colonial Government,' and made payable to bearer." When a trader arrived he was informed that upon leaving the colony any of these notes in his possession would be exchanged for a Treasury bill on London. Within a short time these notes were redeemed at par.[1]

In Barbadoes, after Spanish and Mexican dollars had been demonetized in 1879, the coinage consisted of British tokens and the notes of the bank, but accounts began to be kept in dollars and cents.[2] The Virgin Islands are practically dominated by the Danish currency of St. Thomas, but the money of account is English.[3] St. Lucia as early as 1841 sought to put a limit to the legal-tender quality of token silver.[4] The prudent management of the Colonial Bank requires minute attention to these varying local conditions, not only of currency, but of trade in many communities, and the reports abound with references to the rainfall and

[1] Chalmers, *A History of Currency in the British Colonies*, 48.
[2] *Ibid.*, 58–59.
[3] *Ibid.*, 81.
[4] *Ibid.*, 92.

the state of the sugar, cotton, cocoa, and other crops and influences affecting the market for them.[1] The earthquake which shook Kingston, Jamaica, in the spring of 1907, destroyed the building of the bank there, and reduced profits for the half year, but the cost of rebuilding was covered by the bank's insurance fund. The total assets of the bank on December 31, 1907, were £3,721,830. The principal items of liability were on account of deposits and current accounts, £1,897,082; bills payable, etc., £537,984; notes in circulation, £482,097.[2] The note circulation has increased only slowly, having been £400,555 in 1891 and £452,672 in 1895. In Jamaica the Bank of Nova Scotia has a branch, which in 1906 had in circulation £26,138 of its notes.[3]

The paper currency of the Bahamas is provided by the Nassau Bank, incorporated in 1888, with power to issue notes of five shillings ($1.20) and upwards. The security required for the notes is interest-bearing securities of the United Kingdom, or the United States of America, or any British possession, subject to approval by the governor in council, or coins which are lawful money in the islands. The notes have largely driven out gold, but have remedied the dearth of subsidiary silver.[4] In the Bermudas there is no paper in circulation, but bills of exchange are sold by the Treasury.[5]

The British Guiana Bank, chartered in 1836 by the local government, provides a circulation of about £80,000 in British Guiana. The notes, which are in denominations of

[1] Thus, the report for June 30, 1907, declares: "It is a matter for congratulation that the governments concerned have provisionally agreed to adhere to the Brussels sugar convention for a farther period of five years from September 1, 1908, the British Government, however, being released from the obligation to penalize the importation into the British Islands of bounty-fed sugar."—London *Bankers' Magazine*, November 1907, LXXXIV., 655.

[2] London *Bankers' Magazine*, May, 1908, LXXXV., 771.

[3] *Statesman's Year Book for 1908*, 311.

[4] Chalmers, 168.

[5] *Statesman's Year Book for 1908*, 278.

$5, $20, and $100, do not entirely exclude those of the Colonial Bank.[1] In British Honduras a bank was established at Belize in 1903, known as the Bank of British Honduras. United States currrency is the standard and the government had in circulation in 1906 its own notes to the amount of $136,642.[2]

The French Colonial Banks.

The banks of issue of the French colonies in America were authorized by laws of the republic passed in 1849, which put them under the supervision of the home government and under certain general regulations. These banks were authorized to issue notes no smaller than 25 francs ($5) until 1874, when the law of June 24th reduced the limit to five francs ($1). The circulation was limited to three times the metallic reserve and the liabilities were not permitted to exceed three times the capital. The French colonial banks have a common agency at Paris under the supervision of the Minister for the Colonies.[3] The Bank of Martinique and the Bank of Guadeloupe were each established in 1853, with a capital of 3,000,000 francs, while the Bank of French Guiana was founded in 1855 with a capital of 300,000 francs, which was increased in 1864 to 600,000 francs. The two older banks have loaned largely on the growing crops, which has brought them difficulties and losses in years when the crops have failed, but has contributed greatly to the convenience of the community. The Bank of Guadeloupe had a circulation on June 30, 1906, of 7,399,720 francs and a metallic reserve of 2,623,940 francs. The Bank of Martinique had a circulation of 5,687,655 francs and a reserve of 2,112,595 francs. The Bank of French Guiana had a circulation of 2,429,150 francs and a reserve of 1,018,157 francs. Discounts at the Bank of Guadeloupe were 1,654,000 francs; Bank of Martinique, 2,204,000 francs; Bank of

[1] Chalmers, 138.

[2] *Statesman's Year Book for 1908*, 304.

[3] Courtois, 190–94.

French Guiana, 3,819,000 francs. It was advances on the crops, however, which constituted the largest item of resources at the two insular banks, the amount of such advances at Guadeloupe being 5,152,000 francs and at Martinique 2,548,000 francs.[1]

[1] *Économiste Européen*, August 2, 1907, XXXII., 138.

CHAPTER XIX.

BANKING IN AFRICA AND OCEANICA.

Part Played by English Capital in Developing Africa and the Islands of the Pacific—Creation of the National Bank of Egypt—The State Banks of Algeria and Morocco—The Imperial Bank of Persia—The Banking System of Australia—English Banking in South Africa—French and Portuguese Colonial Banks in Africa and the Pacific.

THE banking experience of the continents of Africa and Asia and of the great islands of the Pacific offers much that is of interest to the monetary historian, in spite of the comparatively recent creation of some of the banking systems. It is of peculiar interest, among other things, because it has put to the test certain economic theories under conditions which could not have been found under the complicated and conservative financial management of European nations. Several of these will be discussed more fully in the next chapter, dealing with exchange in the Orient. It is proper here, however, to point out the large part played in banking in the undeveloped countries by banks managed from London, which have only recently encountered serious rivalry from French and German institutions.

There are two classes of banks having offices in London and doing business outside of Great Britain,—thirty-two colonial banks and thirty foreign banks. The former group includes many of the Australian banks, those of South Africa, several institutions of British India, and two Canadian banks. Of this group almost the entire capital is furnished in Great Britain. This is true also of many banks of the second group, like the Imperial Bank of Persia, the Hong-kong

and Shanghai Banking Corporation, and the National Bank of Egypt. It is not true, however, of the Great French and German joint-stock banks, which have established offices in London in order to control the exchange business with their own countries. Eliminating these institutions, the paid-up capital of the colonial banks at the beginning of 1908 was £37,570,505, and of thirteen foreign banks owned in England and Scotland £11,549,700, making a total of about £49,120,000 ($239,500,000). Deposits and current accounts were £250,876,431 in colonial banks and about £100,000,000 in these foreign banks, making a total of about £350,000,000 ($1,707,000,000),[1] which was nearly equal to the individual deposits of all the national banks of the United States as recently as 1896. While these deposits are by no means concentrated entirely in London, but are scattered in fact over distant quarters of the earth, they give to English capital the control over exchange operations which made London throughout the nineteenth century the clearing house of both the commercial and financial operations of the world. It is of these institutions in Africa and Oceanica that this chapter treats.

The National Bank of Egypt.

Egypt was without a bank of issue until the reforms of Lord Cromer had put the financial organization of the country upon a sound basis and rendered commercial banking possible. The National Bank of Egypt was founded with foreign capital, of which Sir Ernest Cassel was the representative of the British portion. The bank derived its authority from a Khedival decree of June 25, 1898, to which was appended a copy of the statutes, providing for a capital of £3,000,000 sterling, fully paid up.[2] The bank was created as a private institution, governed by a council of twenty-two members, of whom four sat at London charged with special functions. The government, however, was allowed to name

[1] These figures are from the London *Economist*, May 23, 1908, LXVI., 1089, and Supplement.

[2] *Statuts de la National Bank of Egypt*, Art. 10.

two commissioners with supervisory powers and to ratify the nominations of governor and deputy governors made by the council. The term of the governor, first fixed at ten years, was ultimately made five years. The chief office of the bank is at Cairo, with a principal branch at Alexandria and agencies throughout Egypt.

The National Bank acted from the first as banker for the Egyptian Government, but in 1907 a closer relation was proposed by which the bank should increase its capital by £500,000 and hold the government funds as a matter of right. The conduct of the bank in obtaining the necessary funds to handle the big cotton crops of 1906, in the face of monetary stringency in Europe, caused much gratification in Egypt. A severe crisis due to the abuse of credit and the issue of new securities broke out in 1907, however, considerably in advance of the crisis in America. The attempt of the bourse committee to fix minimum prices for securities was naturally abortive, but had the tendency to relieve the market to some degree by the exodus of securities to Europe.[1] The necessity of a more concentrated control of the market and of greater freedom of note issue were among the influences which led to proposals for a more direct share of the government in the National Bank, but as finally presented to the shareholders in the summer of 1908, the degree of government control did not go as far as was first proposed.[2] The Bank of Egypt participated in the creation of a bank in Abyssinia in 1907.[3]

The difficulties of the bank were enhanced in Egypt in periods of pressure by the fact that paper currency was almost unknown and that it was necessary to meet demands

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[1] *Économiste Européen*, June 28, 1907, XXXI., 812.

[2] According to an authorized statement in the *Egyptian Gazette*, it was first intended to give to the government a large share in the bank's affairs, but under the arrangement finally proposed the government agreed to use the bank as long as satisfied with its administration, reserving the right to give notice of withdrawal if it became dissatisfied.—London *Economist*, March 28, 1908, LXVI., 673.

[3] U. S. Consular Reports, April 19, 1907.

for money by the importation of gold. It is believed that large stocks of gold are hoarded by the natives and that these might be gradually released if a more elastic system of note issue were sanctioned.[1] The original basis of the note issue was the English model of covering the notes in full by specie on fixed securities. The statutes required that the service of note issue should be separate from commercial operations, as at the Bank of England, and that the issue should be covered by gold to the amount of at least one-half and the remainder by securities approved by the government. The notes were made a first lien upon this covering.[2] Even under these restrictions the note issue was nearly doubled between 1905 and 1906, the average of the former year having been 913,216 Egyptian pounds and of the latter year 1,804,334 Egyptian pounds. The increase was largely in notes of one Turkish pound and fifty piasters.[3] The circulation on December 31, 1907, had risen to £2,600,000 (Turkish) covered by securities to the amount of £1,149,954 and specie to the amount of £1,450,046. Of the notes outstanding £469,653 were in the reserves of the banking department of the bank, which also held £1,700,827 in free gold and silver.

The commercial operations of the bank have attained a considerable magnitude during its short term of life. Total assets, apart from the note-issuing department, were at the close of 1907 £10,779,404 in Turkish money, of which investments for short terms represented £1,563,333; advances in local and foreign securities, £2,151,858; foreign bills, £1,178,516; investments in government securities, £1,084,017; and cash, as already stated, £2,170,480.[4]

[1] London *Economist*, July 6, 1907, LXV., 1138.

[2] *Statuts*, Art. 5.

[3] *Moniteur des Intérêts Matériels*, July 5, 1907, 2235. The Turkish pound is slightly higher in value than the pound sterling, being computed by the United States Mint at $4.943. The piaster is the hundredth part of the pound. *Cf.* Meliot, *Dictionnaire des Monnaies*, 129–30.

[4] *Bilan Établi au 31 Decembre, 1907*, furnished through the courtesy of Mr. Home, Deputy Governor. The balance sheet in English money is given in London *Bankers' Magazine*, May, 1908, LXXXV., 778.

The Bank of Algeria.

The circulation of Algeria is furnished by the Bank of Algeria, which was given the exclusive privilege of note issue by the Act of August 4, 1851. The capital of the bank was originally 3,000,000 francs, but is now 25,000,000 francs. The notes are legal tender at public depositaries and by individuals. The cash reserve is not permitted to be less than one-third of the amount of the notes and current accounts. The capital of the bank is invested in French public securities and the director is appointed by the President of the Republic upon the nomination of the Minister of Finance. A limit of circulation, to the amount of 18,000,000 francs, was fixed by the law of August 12, 1870, which suspended specie payments for Algeria as well as for the Bank of France, but the maximum circulation was three times increased until it was fixed by the law of March 26, 1872, at 48,000,000 francs. The resumption of specie payments was followed by the law of April 3, 1880, which abolished a fixed limit and left the circulation to be governed by the law of 1851.[1]

The absence of any mortgage banking institution in Algeria led the bank into the dangerous path of loans secured upon real estate, many of which had to be foreclosed in order to escape loss. Although the *Crédit Foncier d'Algérie* was authorized late in 1880, the management of the older bank had already promised the government to lend its aid to the development of colonization and to this end adopted the policy of rediscounting the paper of the mutual societies of agricultural credit.[2] This policy was in violation of the spirit of the statutes of the bank and led to gross abuses.[3] Even when the error was discovered, in 1887, it could not be

[1] Courtois, 197.

[2] Vignon, *La France en Algérie*, 266-67.

[3] Garrot declared in 1892 that the agents of the bank made it their principal occupation "to deal in lands and buildings, to buy and sell wine, grain, lumber, coal, cattle, swine, and other live stock,—everything in fact foreign to or at least outside the programme of an establishment of credit."—*La Banque de l'Algérie*, 194.

at once corrected. In May, 1892, agricultural paper was still held to the amount of 25,397,023 francs ($4,900,000) and it became necessary in 1900 to enter into a special convention with the Ministry of Finance to charge heavy losses against the surplus funds of the bank.[1]

The revision of the charter in 1900 extended the privileges of the bank to December 31, 1920, but imposed the same limitation as was imposed upon the last renewal of the charter of the Bank of France,—that the privilege might be terminated on December 31, 1912, if so voted by the Chambers during the year 1911. In other respects also the new charter conformed to that of the Bank of France. The limit of circulation was fixed at 150,000,000 francs, but the requirement of a metallic reserve of one-third was superseded by the more liberal provision that the bank should so regulate the relations of reserve and commercial paper to its obligations that it should never be exposed to the necessity of delaying the payment of its engagements on demand. The convention of January 30, 1900, was confirmed, that a permanent advance should be made to the Treasury of 3,000,000 francs. It was also required that the bank pay into the Treasury an annual sum rising from 200,000 francs in 1900 to 300,000 francs in 1913. These sums were to be applied to the creation of a bank of agricultural credit. In order to prevent abuses resulting from local environment, the principal office of the bank had already been transferred to Paris. Branches exist in the principal towns of Algeria and by the decree of May 7, 1904, a branch was established at Tunis, with auxiliary bureaux at other points in the province. A new contribution was required to the Treasury of the Bey of Tunis of 1,000,000 francs, with payments rising from 66,666 francs to 100,000 francs annually, these funds to be applied to the extension of agricultural credit.[2]

The rapid development of French commercial interests in Algeria called for a further elevation of the limit of circulation in 1907. The limit was raised from 150,000,000 to 200,-

[1] *Bulletin de Statistique*, July, 1900, XLVIII., 5.

[2] *Ibid.*, May, 1904, LV., 557.

000,000 francs, and authority was conferred on the Ministry of Finance to allow two additional increases of 50,000,000 francs each, with an interval of two years between each increase.[1] The circulation had already reached 135,090,250 francs in the fiscal year 1906 and rose to 150,565,360 francs on October 15, 1907. The volume of discounts, which had been 994,009,992 francs in 1906, was 1,121,270,240 francs ($216,400,000) in 1907. The same law authorized an increase of capital from 20,000,000 to 25,000,000 francs, which was voted by the stockholders on April 29, 1907.[2]

The State Bank of Morocco.

One of the results of the conference of the Powers at Algeciras in the winter of 1905–06 was the decision to create the State Bank of Morocco, to exercise the rights which might be accorded to it by the Sultan, and to have the exclusive privilege of note issue. Its privileges run for forty years from the ratifications of the protocol of April 7, 1906, which were not long delayed. The capital, which was forbidden to be less than 15,000,000 francs, might be augmented by vote of the shareholders. The shares were divided into as many parts as the Powers participating in the conference and arrangements were made for their subscription through the various national banks. The metallic reserve was required to be fifty per cent. of the issues for the first two years after the opening of the bank, and after that date not less than one-third. Of these required reserves at least one-third must be in gold.[3]

The annual report of the State Bank for 1907 showed total assets of 23,580,064 francs, of which 3,975,419 francs was in specie, 5,347,217 francs was advanced to the Government of Morocco, and 4,701,875 francs represented the unpaid subscriptions of shareholders. The net profits for 1907 were 241,891 francs, of which the bulk was devoted to the expenses of organization.[4]

[1] *Bulletin de Statistique*, April, 1907, LXI., 385.
[2] *Moniteur des Intérêts Matériels*, Dec. 13, 1907, 4031.
[3] *Économiste Européen*, April 13, 1906, XXIX., 460–61.
[4] *Moniteur des Intérêts Matériels*, July 5, 1908, 2209.

The Bank of Persia.

The Imperial Bank of Persia was established for thirty years by a group of English capitalists in 1889, and its head office is in London. The capital of the bank is £650,000, with authority to increase to £4,000,000, and the metallic reserve is required to be at least one-third of the amount of notes in circulation. The excess of circulation above the reserve is not allowed to exceed the amount of the capital actually paid in. The reserve may consist of gold or silver, but the charter provides that if Persia adopts the single standard of gold or silver, three-fourths of the reserve shall be held in the metal which may be adopted as the standard. The notes constitute a first lien upon the reserve and may be redeemed at the expense of reducing the reserve below the legal limit.[1] Branches of the bank have been established at Teheran, Isfahan, Tabriz, Meshhed, Shiraz, Yezd, Resht, Kermanshahan, and other leading points. The bank advanced £500,000 to the Persian Government in 1892, for the purpose of buying back the tobacco monopoly from those who held it, and was accorded the guarantee of reimbursement from the customs duties. The dividends paid in 1895 were £35,000, notwithstanding some losses during the previous few years arising from the depreciation of silver.[2] The net profits of 1907, in spite of political disturbances, were £278,215.

In spite of competition, the business of the bank has increased rapidly in recent years. Total assets, which were £1,402,694 in 1895, were £2,189,027 on September 20, 1907. The growth in the use of paper currency in Persia is indicated by the increase in circulation during the same interval from £72,668 to £395,012 ($1,925,000). The circulation of 1906 was £460,000. Cash on hand and at call increased from £141,986 in 1895 to £387,093 in 1907, discounts from £799,726 to £1,167,049, and deposits from £239,164 to £549,048.[3]

[1] Lévy, 236.

[2] *Revue des Banques*, Dec., 1894, XIII., 253.

[3] London *Economist*, May 23, 1908.

The Banking System of Australia.

The banking system of Australia was organized in some respects like the Scottish system prior to the crisis of 1893, but was not managed with the conservatism and good judgment which have been the characteristics of Scotch banking. The difficulties developed in the crisis of 1893, were not, however, the result of any excess of note issues, but of the error common in new countries,—excessive speculation in land and the locking up of assets in investments which did not prove immediately productive. The original Bank Act of Victoria, passed in 1864, was general in its provisions, required no independent audit of bank accounts, and imposed no definite limit upon note issues. The demand for funds for speculation in land led to heavy loans to the speculators, but some of the shrewder bankers evidently doubted their legality and secured in 1888 an important amendment of the banking law. A commission was appointed, with the avowed purpose of revising the law, and the act which resulted from their deliberations purported to impose new safeguards by requiring a paid-up capital of £125,000 for banks issuing notes and by making the notes a first charge upon the assets.[1] These reforms, however, were apparently only the cloak for the new provision that, "Any incorporated banking company may, notwithstanding anything to the contrary contained in any act in force in the Colony of Victoria relating to such banks, advance or lend money on the security of lands, houses, ships, or pledges of merchandise."

Banking in Australia had been carried to its extreme limits, and millions of English and Scotch capital were attracted to the country by its rapid development and by the fact that the people were of the same blood and presumably of the same temper in business matters as the lenders. The

[1] Mr. MacFie, London *Bankers' Magazine*, January, 1892, LIII., 68, 69. Notes constituted an unlimited liability in Queensland, and by the Act of 1874 in New South Wales.—London *Bankers' Magazine*, August, 1894, LVIII., 154.

banks of Victoria alone increased their aggregate liabilities from £19,488,512 in 1880, to £42,224,084 in 1890, while the aggregate assets increased from £23,284,822, including £3,408,961 in coin, to £60,937,955, including £6,868,328 in coin.[1] The proof of the activity and of the risks assumed in Australian banking is afforded by the proportion between available deposits and the discounts and advances made just before the crisis of 1893. The following table shows how the Australian banks loaned "up to the hilt" in comparison with the more conservative English banks[2]:

Relation of Deposits to Loans.

	DEPOSITS.	DISCOUNTS AND ADVANCES.
London Joint Stock Banks ..	£232,332,633	£148,942,304
English Provincial Banks....	62,272,817	46,856,402
Australian Banks.....	149,400,329	154,547,379

The proof that the evils which carried down fourteen great banks and closed several hundred branches in the spring of 1893, grew purely out of bad banking, and had substantially no connection with the note issues, is afforded by the comparatively small figures of the circulation. The banks of Victoria increased their note circulation only from £1,236,046, in 1880, to £1,543,340 in 1890, and in 1893 it was substantially the same. The chief medium of circulation in Australia was gold, and the Australian people were so well accustomed to British methods of the use of credit that the absence or presence of the power of note issue would probably have made little difference in the crisis of 1893. The inflation of credit and the crisis occurred without any great expansion of note issues, and if the habits of the people had required a concurrent expansion it would have been only an incident of the deeper causes of the crash. As M. Lévy sums up the situation[3]:

[1] London *Bankers' Magazine*, April, 1892, LIII., 580.
[2] *Ibid.*, January, 1893, LV., 46.
[3] *Mélanges Financiers*, 299.

It is worth remarking that the Australian crisis was not due to an excess of issues of bank-notes, whose figures, on the contrary, have never ceased to restrain themselves within reasonable limits, but to the large lock-ups upon mortgage advances which could not be repaid, which left the banks without the liquid resources necessary to satisfy their depositors.

The discredit thrown upon the notes of suspended banks by the crisis of 1893, and the pressure for currency which usually accompanies the disappearance of credit, led to a temporary issue of government notes in New South Wales and to some modifications of the banking law. The principal change affecting the bank-note circulation was the adoption of the provision, enacted in Victoria in 1888, making the notes of a failed bank a first charge on the assets. Bank-notes were made a legal tender except at the bank, as in the case of the notes of the Bank of England, and the amount in circulation, in excess of the coin reserve, was not permitted to exceed one-third of the capital, nor to exceed in any case £2,000,000.

The essential difficulty in Australia was the sudden check to the current of British capital which had been pouring in and even quiet withdrawals of much of it. Careful estimates showed that during the two years 1891 and 1892, before the tide turned outward, the total capital imported into the colonies was £25,083,000, of which £18,786,000 was introduced by various governing bodies. During the three years which followed there were withdrawals of private capital to the amount of £7,619,000.[1]

The future of Australian banking was by no means free from storm-clouds after the worst of the crash of 1893 was over. The banks adopted plans of reconstruction, which involved the change of demand and time deposits into deferred liabilities, with interest in most cases at four and a half per cent. This plan afforded a breathing spell, and the principal of these deposits did not become due in any considerable amount until 1898. The payments required in that year by the original plans were £10,605,772; in 1899, £10,873,620;

[1] Coghlan, *The Seven Colonies of Australasia*, 1898, 437.

in 1890, £12,258,320; and in 1901, £8,390,508.[1] As there was grave fear that English and Scotch deposits would be further withdrawn, the Australian bankers faced as serious a problem as that which has confronted the United States during the long period of the withdrawal of foreign capital which followed the passage of the silver purchase law of 1890. It was indeed, from a mathematical standpoint, much more serious in the case of Australia, for the amount of liability to Europe was computed at £20,000,000, or at the rate of £16 per head for the Australian population.[2] The fact that the burden was proving heavy was indicated by the second suspension, on July 17, 1895, of the City of Melbourne Bank, with liabilities of nearly £4,000,000. The bank first suspended on May 17, 1893, and reopened on July 19th following, but it was declared by the directors in a report of March 31, 1895, that the high rate of interest on deposit receipts could not be maintained, and eventually the bank went into liquidation.

Reviewing the effects of the crisis from the vantage ground of eleven years, its results upon the supply of capital in Australia were thus summed up by Coghlan[3]:

> There has been a decrease in the money employed in Australia by the banks of issue during thirteen years to the extent of £30,461,695. Within the same period, capital to the extent of £7,071,874 has been written off, and £1,300,000, the capital of three defunct banks, has also been lost; on the other hand, capital (including preferential capital) to the amount of £9,964,961 has been called up. It may therefore be stated that approximately £1,593,087, new capital, has been obtained by the banks; so that the actual withdrawal of money has been greater by this amount than shown above, and, in reality, the total withdrawals may be put down at £32,054,782. The greater part of the money withdrawn consisted of British deposits, which the banks were accustomed to accept very freely in the period before the bank crisis of 1893. The extent of the deposits made with the branches of the banks in Great Britain may be gauged from the fact that the twelve banks from which returns were obtained held British

[1] London *Bankers' Magazine*, June, 1894, LVII., 869.

[2] *Ibid.*, December, 1894, LVIII., 741.

[3] *A Statistical Account of Australia and New Zealand*, 1903-04, 787.

interest-bearing deposits to the amount of £26,406,000, while the nine smaller banks from which returns were not obtained are estimated to have had British deposits to the amount of £3,684,000; so that the total of such deposit in use in Australia could not have been far short of £30,000,000.

The years which followed 1893, therefore, were years of conservatism and restriction of business. Unpaid capital was called up by the banks in such amounts that total capital resources, including reserve funds, rose from £14,724,587 before the crisis to £22,334,047 in 1898, although in the meantime two banks with capital of £900,000 became defunct and capital was written off in other cases to the amount of £4,731,550. Reserve funds were gradually built up until capital resources rose to £28,365,464 in 1904 and to £29,672,740 in 1907. Total liabilities fell from £171,660,791 in 1895 to £166,951,237 in 1897. Later years showed an improvement, which was accelerated with time and carried liabilities in 1904 to £170,710,593 and in 1907 to £203,178,212. Deposits in the commercial banks, which in 1901 were £107,522,000, had increased in 1913 to £171,181,000. The largest banks in Australia, as shown by their deposit accounts near the close of 1913, were the Bank of New South Wales, with deposits of £34,001,865; the Union Bank of Australia, £21,334,590; the Commercial Banking Company of Sydney, £21,156,322; and the Bank of Australasia, £18,088,955.[1]

The Australian banking system suffered, before the union of the different states, from lack of uniformity of regulation. It was also threatened by the tendency to state socialism, which crystallized in 1910 in a law providing for the substitution of a government note issue for the circulation of the banks. The law provided that, six months after its passage, issues of notes by the separate states should be prohibited and that future issues by incorporated banks should be subject to a heavy tax. The Federal Minister of Finance was charged with the issue, retirement, and general management of the new note issue, which was made legal tender

[1] *Vide* London *Statist*, Foreign Banking Section, May 23, 1914.

throughout the Australian states. The notes are redeemable in gold at the capital, and are protected by a reserve of 25 per cent. up to the amount of £7,000,000, beyond which amount they are fully covered by gold. The denominations of notes are for ten shillings, and for one, five, and ten pounds, and multiples of £10. The Minister of Finance is authorized to employ the proceeds of the note issue to strengthen the gold reserve, to buy government securities, or to make deposits in the banks. He is authorized to issue Treasury four-per-cent. bonds for a term not exceeding five years, if necessary to protect the notes.[1]

In the whole of Australasia, recovery from the depressing effects of the crisis of 1893 was slow until after the close of the nineteenth century. From that time forward, however, improvement became more rapid, as is shown by the following comparison of deposits:

YEAR.	ORDINARY BANKS.	SAVINGS BANKS.	TOTAL.
1891	£119,460,000	£18,943,000	£138,403,000
1901	107,522,000	38,150,000	145,672,000
1911	170,212,000	76,587,000	246,799,000
1913	175,181,000	94,462,000	269,643,000

The Banks of South Africa.

The strongest banks of South Africa are chiefly English institutions, with their head offices in London. The Cape Government passed an act in 1891, requiring the withdrawal of circulating notes then outstanding and the deposit of securities with the Treasurer-General to cover future issues. The only securities accepted were those of the Cape Government, which tends to justify the belief that the law was suggested by the necessity for placing the securities rather than the benefit of the banking system. The notes circulate over a wide area and no provision is made for any specific coin reserve. The note issues of the great English

[1] Lévy, *Banques d'Emission et Trésors Publics*, pp. 312–13.

banks are so overshadowed, however, by their discount and exchange business that the regulations on the subject are of minor importance. The development of the gold mines furnishes a metallic circulating medium of magnitude, and British methods of banking by transfers of credit are rapidly making headway into the interior of Africa. The unusual stimulus given to business in South Africa during the past few years by the great gold discoveries has afforded the banks large profits and encouraged the extension of branches over the vast territories which have come under English sovereignty. The combined paid-up capital of the banks operating in the Cape of Good Hope at the beginning of 1908 was £4,456,925, circulation in the colony only was £1,104,454, and gross assets in the colony were £18,080,509.[1] These figures did not include circulation and assets of the same banks operating through their branches in other British dependencies in South and East Africa.

The Standard Bank of South Africa is the largest of the English banks, with a subscribed capital of £6,194,100, of which one-quarter has been paid up, and a reserve fund of £1,900,000. Total liabilities, which in 1895 were £15,873,509, increased to £28,015,035 at the close of 1906, but declined to £26,171,558 at the close of 1907. The decline was due to general trade conditions in South Africa, which were reflected in the fall of the note circulation on December 31st from £1,060,339 in 1906 to £929,333 in 1907. The assets at the last date included £4,070,825 in securities, £9,913,436 in discounts and advances, £3,621,384 in bills of exchange, and £4,057,821 in cash in hand and with bankers.[2] The usual dividend of sixteen per cent. was reduced for 1907 to fourteen per cent., without any additions to reserve.[3]

The National Bank of South Africa was founded in 1891, with headquarters at Pretoria, under the name of National Bank of the South African Republic. The capital, at that

[1] *Statesman's Year Book for 1908*, 214.

[2] London *Bankers' Magazine*, May, 1908, LXXXV., 779.

[3] *Ibid.*, LXXXV., 726.

time £502,000, was afterwards increased to £1,100,000. Total assets, which were £2,281,472 in 1894, were £7,814,649 on December 31, 1907. Note circulation on the latter date was £215,136, covered by securities as required by the new government of the Transvaal. The assets included £730,387 in securities, £3,323,305 in discounts, £1,264,693 in bills of exchange, and £1,218,976 in cash and money on short notice.[1]

The Bank of Africa has twice increased its capital since 1894, and the amount in March, 1908, stood at £1,000,000. Total assets increased from £4,683,249 on June 30, 1895, to £8,680,863 on December 31, 1907. The notes outstanding on the latter date were £210,144, and the assets included the securities required under the Cape Colony law. All securities held were valued at £1,068,336; bills receivable, £1,470,751; loans and advances, £2,598,668; cash and resources on short notice, £1,453,171.[2]

The African Banking Corporation, which has an authorized capital of £2,000,000, has issued only £800,000, of which half has been paid up. The bank increased its note issues in 1895 in order to extend branches into Rhodesia, Natal, and the Transvaal,[3] and its circulation on March 31, 1908, constituted £4,058,371 of total liabilities of £5,138,803. The assets contained coin and notes to the amount of £762,185, government stocks £417,427, and discounts £2,322,811. The government stocks included a deposit of £378,369 against note issues in the Cape Colony, a guarantee which is not required in the other districts where the notes circulate.[4]

The British dependency of Natal has a bank of issue known as the Natal Bank, Limited, with a paid-up capital of £500,000 and a subscribed capital of £1,741,160. The total liabilities on December 31, 1907, were £5,068,171 of which £97,862 was on account of notes in circulation and

[1] London *Economist*, May 23, 1908, Supplement, 44.
[2] *Ibid.*, May 23, 1908, Supplement, 25.
[3] London *Bankers' Magazine*, Nov., 1895, LX., 661.
[4] *Ibid.*, July, 1908, LXXXVI., 73.

£3,512,166 on account of deposits and current accounts. Discounts and loans were £2,919,112 and coin held was £707,000.[1]

The island of Mauritius, 500 miles east of Madagascar, has an English joint-stock bank, but it does not issue notes. The paid up capital is £125,550 and total assets on December 31, 1907, were £447,232.[2] The Indian rupee is the currency of the island and the money in which local accounts are kept.

French and Portuguese Colonial Banks.

The banks of the French colonies have long been subject to general laws, establishing supervision in Paris. The head of each bank is named by the President of the Republic from a list of three names submitted by the supervisory committee (*commission de surveillance*) at Paris. He is not permitted to engage in business nor can any paper endorsed by him be accepted for discount.[3] The shareholders have the right to choose three of the four members of the administrative committee. The colonial banks have the exclusive privilege of note issue in the territory allotted to them, and in 1874 were allowed to reduce the minimum denomination of notes to five francs ($0.965). The notes must be covered by specie in the proportion of one-third, and the total debts of the bank are not permitted to exceed three times the capital and surplus unless the excess is fully covered by specie. The provision bringing the surplus into the computation was made in the law of December 13, 1901, which embodies the last extension of the charters. The privilege of the Bank of Réunion and the West Indian banks was extended to January 1, 1912.[4]

The banking needs of French West Africa were met for a long time by the Bank of Senegal, which began business August 4, 1855, under the provisions of the general law of

[1] London *Bankers' Magazine*, May, 1908, LXXXV., 777.
[2] *Ibid.*, May, 1908, LXXXV., 766.
[3] Goumain-Cornille, *Les Banques Coloniales*, 36.
[4] *Bulletin de Statistique*, December, 1901, L., 575.

April 30, 1849. The capital of the bank was 600,000 francs, and up to 1901 it had distributed dividends amounting on the average, in spite of some serious losses in 1896 and 1897, to eight per cent. annually.[1] The great extension of French interests in West Africa, however, required an institution of larger capital and wider scope. This was provided by the Bank of West Africa (*Banque de l'Afrique Occidentale*), which was incorporated soon after the revision of the colonial general banking law in 1901. The new institution was created with a capital of 1,500,000 francs ($300,000) fully paid up. Of this amount 900,000 francs was issued to the shareholders of the Bank of Senegal at the rate of 150 per cent. for the nominal value of their shares. The Bank of Senegal was thus fused completely with the new institution, which soon took measures to increase its capital to approximately 6,000,000 francs.[2] The Bank of West Africa serves a wide area of country, over which it has extended its branches as rapidly as conditions permitted. The circulation rose from 3,658,500 francs on June 30, 1904, to 6,943,525 ($1,340,000) on June 30, 1906. Cash resources on the earlier date were 3,604,227 francs and on the later date 3,427,198 francs ($662,000).[3]

The Bank of Réunion—an island east of Madagascar—was founded July 4, 1853, under the colonial banking law of 1849, with a nominal capital of 4,000,000 francs. The bank was very successful for several years, showing average discounts for the five years ending with 1860 of 18,539,000 francs ($3,575,000). The sudden drop in the sugar market in 1857–8 was met by raising the discount rate to seven per cent. and reducing advances to 4,000,000 francs, and was passed without loss.[4] The authority granted the bank in 1870, to lend on merchandise to its full value, was abused and caused some losses, but did not prevent the declaration of dividends

[1] Goumain-Cornille, 161.

[2] The amount actually taken up to January 28, 1906, was 5,986,500 francs—*Économiste Européen*, August 2, 1907, XXXII., 140.

[3] *Économiste Européen*, May 26, 1905, XXVII., 650, and August 2, 1907, XXXII., 139.

[4] Denizet, *Les Banques Coloniales*, 163–70.

as high as twenty-two per cent. in 1880.[1] These high dividends, however, marked a precarious situation, which was revealed by the sugar crisis of 1884. An inspector of finances sent from France reported that the capital of the bank was seriously impaired, and forbade the distribution of further dividends.[2] A new crisis in the sugar market in 1890, which carried quotations down from 60 to 36 francs per 100 kilos, and the crash of the *Crédit Agricole*, with serious entanglements with the bank, finally reduced the latter to such a condition that the government came to its rescue by the decree of July 8, 1898, granting a subsidy of 1,500,000 francs. The suspension of dividends for five years and greater prudence in making loans gradually restored the bank to solvency, but it had a difficult problem in providing for the large volume of its notes piled up in the public Treasury in payment for exchange on France, which it was unable to redeem at the time of the crisis.[3] The capital of the bank was reduced in 1899 to 3,000,000 francs, which is invested in French three per cents. The circulation on June 30, 1906, was 8,952,057 francs ($1,727,000) and the cash reserve 3,023,498 francs ($583,000).

The French island of New Caledonia, east of Australia, was dowered with a bank in 1871, which was at first connected with the development of large land enterprises. The inconvenience of this combination was soon recognized and the bank was given a separate entity by decree of July 14, 1874, with a capital of 4,000,000 francs and the name of Bank of New Caledonia. Even this step did not greatly prolong its life. Imprudent loans wiped out the capital and compelled suspension on October 16, 1877. In order to meet the dearth of currency, the government issued Treasury bonds to the amount of 1,500,000 francs, from five to one hundred francs in denomination, and in 1888 a branch of the Bank of Indo-China was established in the island.[4]

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[1] Goumain-Cornille, 154.

[2] Denizet, 177.

[3] *Économiste Européen*, August 2, 1907, XXXII., 140.

[4] Goumain-Cornille, 112-15.

The dependencies of Portugal are provided with banking facilities by the National Ultramarine Bank (*Banco Nacional Ultramarino*), which was created by a royal decree of August 12, 1864, with a nominal capital of 12,000,000 milreis ($12,960,000), of which 3,600,000 milreis was actually subscribed. The field of operation of the bank, which was originally limited to a few of the colonies, was extended to all by a law of April 27, 1901, and the bank was required to establish branches at once in the many Portuguese establishments in the West Indies, Asia, and Africa. The capital was to be advanced to 5,000,000 milreis by February, 1903, and afterwards by successive stages to 12,000,000 milreis. The bank was given the exclusive privilege of issuing notes in the colonies, but this privilege was only until November 30, 1911. The limit of note issue is that of the original capital, 12,000,000 milreis, and the notes are of three types: large denominations in pounds sterling (£5, £10, and £20); silver notes, from one milreis ($1.08) up to 100 milreis ($108); and copper notes of one and two milreis. The earnings, after setting aside fifteen per cent. for reserves and smaller items and a first dividend of eight per cent. for shareholders, are divided equally between the bank and the government. The share of the state, however, must not fall below the taxes prescribed on circulation, which are a quarter of one per cent. up to 3,000,000 milreis and one-tenth per cent. additional for each increase of issues by the amount of 500,000 milreis. The bank makes an advance to the state without interest of 1,200,000 milreis, to be employed only for the colonies, and performs gratuitously where it has branches all the operations of the colonial Treasury.[1]

[1] Goumain-Cornille, 266–68.

CHAPTER XX.

BANKING IN JAPAN AND KOREA.

Early Japanese Experiments with Paper Money and with the American Banking System—The Reform of 1878 and the Creation of the Bank of Japan—How it Took up the Notes of the National Banks—Comprehensive Work of Count Matsukata—The Adoption of the Gold Standard in 1897—How the New Mechanism Bore the Strain of War with Russia—The Bank of Taiwan and the Monetary System of Korea.

THE Empire of Japan, after her introduction to western civilization and the settlement of her internal troubles, showed her admiration for things American by experimenting with government paper money and adopting the system of local national banks issuing notes on the security of the public debt. This system soon broke down and the far-sighted financial administration of Count Matsukata adopted the European system of a central bank of issue and supplemented it later by the introduction of the gold standard. It was by the aid of this reorganized monetary mechanism that Japan was enabled to enter upon the career of Oriental empire which resulted in her victories over Russia in 1904 and 1905 and the extension of her influence over Formosa and Korea.

Paper money was in use in Japan for many generations, but its recent history dates from 1867. That year was marked by the overthrow of the feudal system, which had long prevailed in the Empire, and the restoration of the power of the Mikado. It was considered necessary to continue the circulation of the existing paper money in order to pay the indemnities granted to the feudal lords for the

surrender of their privileges and their land taxes. A new form of paper, bearing the traditional emblems of the Empire, was adopted and acquired a more general circulation than the old.[1]

The local banks of issue were authorized under the name of national banks by a law of 1872. The law was passed largely to prevent the fall in value of the government paper money, and the redemption of the paper was partially provided for by the issue of government stocks. The banks were required to purchase the stocks in order to issue circulating notes and were at first required to redeem their notes on demand in gold. The depreciation of silver and the excess of paper caused such a persistent demand for the conversion of the notes that the banks were authorized in 1876 to redeem in government paper money. The capital of these banks was allowed to consist of any form of government stock, and the banks were required to leave this stock in the custody of the government, receiving eighty per cent. of the amount in paper. There was almost a mania for new banks between 1876 and 1879 and the number in operation at the close of the latter year was 153. Paper fell in 1877 fifty per cent. in relation to gold, and the situation was made worse by the issue of 27,000,000 yen in government notes to pay the expenses of putting down the rebellion of 1877–78.

An effort was made in 1878 to bring order into the disordered financial system by the suspension of further issues of paper, the issue of short-term Treasury bonds bearing interest, exchangeable for government notes, and the issue of long-term bonds bearing interest at seven per cent. and payable in silver. It was announced that the redemption of a portion of these bonds annually would be accompanied by the burning of an equal quantity of paper money. These measures were completely successful. The breaking down of feudal barriers developed the domestic commerce of the country and stimulated a production of commodities which found an outlet abroad and brought silver pouring into Japan in payment. The banks bought up the depreciated paper

[1] G. Boissonade, *Journal des Économistes*, Sept., 1895, 410.

money so rapidly, in order to exchange it for bonds, that the issue of bonds had to be temporarily suspended to prevent too great a rarefication of the circulating medium. A mint was opened, specie was received at the custom-houses at its current value in paper, and in less than seven years (in 1885) paper was within five or six per cent. of par.

The new policy was promoted by the creation in 1882 of the Bank of Japan, with capital of 10,000,000 yen ($5,000,000) and with powers and by-laws closely modelled upon those of the National Bank of Belgium.[1] The life of the bank was fixed at thirty years, subject to renewal, and the ownership was limited to Japanese subjects, approved by the Minister of Finance. The bank is prohibited from becoming a shareholder in industrial corporations and the directors (meaning thereby the active managers) are not permitted to be officers of other banks or corporations. The governor and vice-governor are appointed by the state for terms of five years; the four directors are elected by the shareholders, subject to the approval of the Minister of Finance; but the auditors are chosen by the shareholders, without restriction. It is provided by the charter that "The government shall oversee the business management of the bank, and may not only stop acts which are contrary to the regulations or the by-laws, but also those which, in the opinion of the government, are contrary to the interest of the state."[2]

It was the avowed purpose of creating the new bank to overcome the evils of the depreciated bank paper with which the country had been flooded under the system of note issues by local banks secured by bonds. The steps taken were direct and effective and form an interesting example to any other country placed in a similar situation. The government had been gradually accumulating a specie reserve fund, which became large enough in 1885 to permit an announcement that after January 1, 1886, it would begin to be paid out in the redemption of government notes.[3] Equally

[1] *The Adoption of the Gold Standard in Japan*, 64.

[2] Imperial Ordinance XXXII. of June, 1882, Art. XXIV.

[3] The government did not hesitate to resort to taxation in order to

important, however, was the withdrawal of the notes of the so-called national banks. These notes had reached an amount of 34,420,000 yen in April, 1880, and still stood at 29,501,484 yen at the close of 1885, when the notes of the Bank of Japan had begun to enter into circulation.

It was obvious that the new convertible notes could not be made to circulate in competition with a mass of inconvertible paper, forming a cheaper method of making payments. Provision was made, therefore, for the assumption by the Bank of Japan of the entire note liability of the national banks. These banks were required to turn over their lawful money reserves to the Bank of Japan, and in addition to pay each year to that institution from their profits an amount equal to two and one-half per cent. of their note issues. These sums were to be invested in securities and the interest was to be applied to the retirement of the notes of the national banks. Notes received in this way by the Bank of Japan were to be delivered to the department of finance for cancellation, and thereupon the bonds deposited as security were to be restored to the banks and the bond-secured system was to die a quiet death.[1] If, after fifteen years, there still remained national bank-notes which had not been redeemed, the bonds in the custody of the Bank of Japan were to be sold to afford the means of redemption.

These measures, put in force by Imperial ordinance of May 5, 1883, were soon supplemented by others. The Bank of Japan, which at the close of 1887 had already notes in circulation to the amount of 53,454,803 yen ($26,790,000), was authorized by the ordinance of August 1, 1888, to increase the limit of its authorized circulation to 70,000,000 yen. This amount, covered by securities, might be exceeded

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obtain these funds. In 1885 several special taxes were levied, from which one-half of the surplus revenue "was devoted to the redemption of inconvertible paper money, while the other half was added to the reserve fund with the object of employing it for securing the importation of specie from abroad."—*The Adoption of the Gold Standard in Japan*, 70.

[1] *Ibid.*, 80.

by any amount which was fully covered by specie. A leaf was taken from the German law in the provision that the government might permit the extension of the limit of circulation in case of need, subject to a tax of five per cent. The circulation not covered by specie is required to be covered by good commercial paper or Treasury bonds. Of the new issue of notes authorized by the ordinance of 1888, 27,000,000 yen was to be used for the redemption of the national bank-notes, and a loan of 22,000,000 yen was to be made to the government for the purpose of cleaning up the government notes. By the close of 1897 these notes outstanding had fallen to 7,451,098 yen, national bank-notes stood at only 5,024,728 yen, and the convertible notes of the Bank of Japan had risen to 226,229,058 yen. It was felt that the time had come to give the *coup de grâce* to the old notes. This was done by an Act of June 10, 1898, forbidding the circulation of the government notes after December 31, 1899, and by a series of laws passed somewhat earlier for winding up the note-issuing functions of the national banks and converting them into joint-stock banks.[1]

Success marked every stage of the operations of the Bank of Japan to bring order into the conditions affecting the paper currency. So evident was this success, even before the reform was completed, that the bank was authorized in August, 1895, to increase its capital to 30,000,000 yen ($15,000,000). An increase of capital took place also at the Yokohama Specie Bank in March, 1896, from 6,000,000 to 12,000,000 yen, and in September, 1899, to 24,000,000 yen. At about the same time (March, 1899), the Bank of Japan, which had already in 1890 been allowed to increase the limit of its authorized circulation to 85,000,000 yen, was again given authority to increase the limit, this time to 120,000,000 yen ($60,000,000). Of the new issues of 35,000,000 yen, 15,000,000 was to be employed in facilitating rediscounts at home and exchange operations and 20,000,000 in aiding the Specie Bank in promoting trade with foreign countries.[2]

[1] *The Adoption of the Gold Standard in Japan*, 89–94.

[2] *The Post-Bellum Financial Administration of Japan*, 248-51.

Japan originally employed both gold and silver money, but was driven to the silver standard when the restoration of specie payments was attempted in 1882 and suffered inconvenience by the great difference of exchange with gold-using countries. There was serious discussion of the currency problem and some agitation in favor of the gold standard. A commission was appointed in September, 1893, to consider the existing state of the currency and the best standard for Japanese interests. The result of their deliberations did not prove harmonious and only individual reports were first submitted to the government. The theory that a high premium on specie stimulates exportations, and that its disappearance removes this stimulus, was not verified in the case of Japan. Exports steadily increased, in spite of the rise in value of the paper money ; but this phenomenon is partially explained by the fact that the rise of paper in relation to silver was neutralized by the fall of silver in relation to gold, which left the paper money in something like its old relation to the gold standard of other countries.[1]

The war indemnity paid by China under the treaty of Shimoneseki (April 17, 1895) afforded a means to Japan, as the French indemnity had to Germany in 1870, of establishing the gold standard without imposing serious financial burdens on the country. It was proposed by the Japanese government that the amount of this indemnity, fixed originally at 200,000,000 Kuping taels, should be converted " into English money at the rate of exchange equal to the average ratio of the price of silver bullion to that of gold bullion in the London market during the three months previous to the day the method of payment of the war indemnity is agreed

[1] The effect of the silver standard in Japan, according to the observation of Mr. Soyeda, who is in the best position to know the facts, was to raise domestic prices as well as to increase the burden of gold obligations expressed in the silver standard. He says : " The prices of exportable goods, such as rice, the chief article of food, have risen a great deal. Thus the effect of the depreciation was felt not only in the external trade, but also in the internal transactions." —*Economic Journal*, Dec., 1894, IV., 732.

to between the two governments."[1] This proposition was accepted by the Chinese Government, the weight of the tael was fixed at 575.82 grains of pure silver, and exchange was computed upon the basis of quotations in the London market for June, July, and August, 1895. The result was an average price per ounce of 30.4429 pence, London standard (0.925 fine), and the indemnity worked out at £32,900,980.

"Since now [it is naïvely declared by the official report on the subject] the way was opened for the creation of a gold reserve, the finance minister, Count Matsukata, seeing that the time was fully ripe for putting into effect the plan of coinage reform, on the 25th February, 1897, submitted the drafts of the coinage law, with its subsidiary laws, to the Cabinet Council."[2] Before this time (in July, 1895) the majority of the monetary commission had reported in favor of the gold standard and the accumulation of a gold reserve. Count Matsukata had anticipated also the favorable action of the cabinet by beginning to bring gold bullion and British gold coin into Japan. These operations, involving some risk of disturbance to the exchange market, extended from January 11, 1896, to March 31, 1899, and were aided by the Bank of Japan and the Yokohama Specie Bank.[3] In the meantime, so complete was the mastery of the ministry over the Diet that the project of law introduced on February 25th was favorably reported on March 10th to the lower chamber,

[1] This contract, amazingly advantageous to Japan, is attributed to a suggestion in May, 1895, by Count Matsukata, then finance minister, to Count Ito. A memorandum was subsequently drawn up, seeking to show the losses to China through the rise in the price of silver if she sought to deliver the metal to Japan. A slight concession was made from the weight of the tael as originally proposed by Japan.—See *The Adoption of the Gold Standard in Japan*, 168-72.

[2] *Ibid.*, 174.

[3] Of a total sum of £30,476,642 in English currency which was transferred, £15,811,261 was remitted by drafts, £3,090,504 was sent in silver, and £11,574,876 was sent in gold bullion, of which £7,733,517 was received before September 30, 1897, and promptly converted into Japanese gold coins.—*The Adoption of the Gold Standard in Japan*, 225.

received its first reading in the House of Peers on March 15th, and became law on March 26, 1897.[1]

The monetary reform practically gave fixity to existing conditions of exchange, as had been done in Austria and Russia. The amount of gold in the old standard yen was reduced by one-half and the silver yen, which had been the common medium of circulation, was fixed theoretically at the weight of 26.956 grams, nine-tenths fine, with a relation to gold of one to 32.34.[2] Hence, it was argued, no change in the existing level of prices would result from the change of standard and the old silver yen would circulate side by side with the new coins of gold.[3] No allowance was made for a possible decline in silver, but it was rather assumed that the action of Japan in abandoning the metal as a standard would accentuate its downward course. Gold coins of the new standard were offered for the old silver yen, which were called in and recoined into subsidiary pieces or sold as bullion.[4] The process of exchange was permitted only from October 1, 1897, to July 31, 1898, but was so complete that no reports reached the authorities of any of the old money which failed to be exchanged. Some of the foreign banks, fearing that the reform might not succeed, issued a circular in July, 1897, reserving the right to pay depositors in gold or silver at their option, but the Bank of Japan and the Yokohama Specie Bank exchanged their silver in bulk for gold on or about October 1, 1897, and began to make their payments in gold.[5]

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[1] *The Adoption of the Gold Standard in Japan*, 192.

[2] The value of the new yen in United States currency was 49.8 cents.

[3] Cf. Bourguin, in *Revue d'Économie Politique*, 1897, XI., 716.

[4] The total amount redeemed by the government was 75,093,822 yen ($37,500,000). Of this amount, 27,567,012 yen was recoined into subsidiary coins; 6,740,148 yen were taken to Formosa, Korea, and elsewhere; and 40,786,662 yen were sold as bullion, chiefly in Shanghai and Hong-kong. The profit on the subsidiary coinage more than offset the loss on bullion sold.—*The Adoption of the Gold Standard in Japan*, XI.

[5] Paultre, in *Questions Monétaires Contemporaines*, 757.

The determination of Japanese financiers to make the adoption of the gold standard absolute led to the suspension of coinage of pieces of one yen in silver, the limitation of the legal tender quality of silver to ten yen, and the effort to force gold into general circulation. The new system would probably have been easier to maintain if a larger place had been left for silver in the circulation, as was done in British India and the Philippines, and if reliance had been placed to some extent upon exchange funds abroad instead of the segregation of gold at home. The high value of the gold coins made them ill-adapted to the smaller transactions of the country. They gradually found their way into the coffers of the Bank of Japan, when they were not exported, and were represented in the circulation by the paper notes of the banks.[1]

The prediction that trade with silver-using countries would decline by reason of the adoption of the gold standard did not find any confirmation in events. Silver prices had risen on the average about fifty per cent. between 1873 and 1894, rents at Tokio more than one hundred per cent., and wages about thirty-three per cent. The stereotyping of these conditions by the adoption of the exchange rate of the day did not check Japanese exports to England, which more than doubled from 1897 to 1902, while exports to the silver-using country of China increased in a somewhat greater ratio.[2] Economic activity was greatly stimulated by the change of standard, a closer relation was established with the money markets of the world, and foreign capital began to be attracted towards the country.[3]

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[1] Dumolard declared in 1903 that during a sojourn of several years in Japan he had never had the good luck to receive a single piece of gold.—*Le Japon, Politique, Économique et Social*, 105.

[2] Pallain, 162–64. This writer declares that "during the period of the monetary depreciation (up to 1897) while the premium on exchange should, according to some, have acted as an increase in the customs tax and an encouragement to exportation, the increase in importations came chiefly from gold-standard countries, like England, while the exports of Japan to these same countries increased in a feeble degree."—*Les Changes Étrangers et les Prix*, 166.

[3] *The Post-Bellum Financial Administration of Japan*, 197.

Notwithstanding these favorable symptoms, there were circumstances which threw a doubt on the question whether the economic resources of Japan were ripe for maintaining the new monetary system in the form in which it was adopted. The large imports of foreign goods led to a drainage of gold which was only checked by the negotiation of loans abroad. Exports of gold exceeded imports by a total of about 42,800,000 yen during the three years ending with 1900, and the estimated gold stock of the country outside the Bank of Japan fell to 52,930,394 yen ($26,450,000).[1] One of the objects of establishing a stable exchange was apparently accomplished, however, in attracting foreign capital, as shown by the increase in the capital of stock companies from 532,522,377 yen at the close of 1897 to 887,606,190 yen at the close of 1903. Government loans were placed in London in 1899 and 1902, and funds on deposit there were employed from time to time as exchange funds for protecting specie reserves at home.[2]

The resources of Japan were put to a severe test in the war with Russia, but it was a test from which the Bank of Japan and the new monetary system emerged without discredit. The government leaned strongly upon the bank in finding means for carrying on the war. It was declared in the annual report for 1905 that the bank had discounted Treasury bonds for 258,940,000 yen and commercial paper for 301,845,010 yen, and that it had bought gold and silver to the amount of 686,000,000 yen.[3] Its advances to the Treasury on current account, which amounted on the average for 1903 to 19,900,000 yen, reached on June 11, 1904, the amount of 34,300,000 yen, but were reduced on August 13th, as the result of the loan in London, to 19,000,000 yen.

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[1] *Financial and Economic Annual of Japan, 1906*, 152. I remarked on the more favorable estimate of 1899, which was 93,360,986 yen, or a little more than one dollar per capita, that it "was perhaps an inadequate basis upon which to inaugurate the gold standard."—*Special Report on Coinage and Banking in the Philippine Islands*, 18.

[2] *The Post-Bellum Financial Administration of Japan*, 225.

[3] Raffalovich, *Le Marché Financier en 1905-06*, 578.

Advances by the bank to the state, which had been on the average of 1903 36,900,000 yen, reached on June 4, 1904, 96,000,000 yen—an amount in excess of the gold stock; but they also were reduced from the proceeds of the foreign loans.[1]

Gold began to leave the country rapidly and only the energetic action of Mr. Takahashi, vice-governor of the bank, in obtaining large loans for the government in London and New York, averted the exhaustion of the bank's specie resources. The specie reserve on May 31, 1904, had fallen to 68,087,261 yen ($34,000,000), gold exports ran for four months at an average of 14,000,000 yen per month, and the exchange value of the yen declined to two shillings and one-eighth pence.[2] Conditions changed with the subscriptions for the loans. The public were called upon to bring their gold to the bank and the government transferred to its vaults a portion of the proceeds of the payments made in London and directed that it be added to the reserves.[3] The lowest point subsequently touched by the specie reserve was on December 31, 1904, when the amount was 83,581,226 yen; but it was restored from the proceeds of new loans and did not again fall below 100,000,000 yen.

A device for meeting currency demands in Manchuria was adopted by the government of Japan similar to that adopted by Russia. This was the issue of "war notes" expressed in yen, but redeemable in silver. They were issued in denominations as low as ten sen (five cents) and as high as ten yen ($5.00). While their circulation was not permitted in Japan, they obtained a wide currency in Korea as well as in Manchuria, and arrangements were made to convert them on favorable terms into gold, especially when received by Japanese merchants for goods sold in Manchuria.[4]

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[1] Helfferich, 119. The German author declares that "Japan availed herself in a very large measure of the central bank to meet her needs for money and for a certain time even to the utmost possible limit."—*Les Finances des Belligérants*, 122.

[2] *Le Marché Financier en 1904-05*, 615.

[3] *Report on the War Finance*, 23.

[4] *Ibid.*

The business of the Bank of Japan is done largely through its note issues, as in the case of the Bank of France. Not only is the deposit system a thing of recent growth in Japan, but such private deposits as exist find their way more generally to the joint-stock banks than to the central bank.[1] As the result of the war and the magnitude of the enterprises carried on by the government, especially since it took over the tobacco trade and the railways, a large part of the resources of the Bank of Japan are absorbed in transactions for the state. Hence the relatively small amounts of commercial bills discounted which appear in the table below of the operations of the Bank of Japan for representative years:

Operations of the Bank of Japan.

DEC. 31	CIRCULATION.	SPECIE.	BILLS DISCOUNTED.
	(In yen, = $0.498)		
1885	3,956,161	3,311,461	1,314,567
1890	102,931,766	44,622,413	21,562,322
1895	180,336,815	60,370,797	34,690,723
1900	228,570,032	67,349,129	97,558,216
1903	232,920,563	116,962,184	44,380,493
1904	286,625,752	83,581,226	69,595,616
1905	312,790,819	115,595,026	109,184,177
1906	341,766,164	147,202,125	106,001,666
1907	369,984,111	161,742,131	124,609,071

The Bank of Taiwan was made the instrument of Japanese financial influence in Formosa in 1899. It was not at first deemed practicable to establish the gold standard in the island, and a loan of 2,000,000 yen in silver pieces of one yen was made to the bank by the government. The capital of the bank, which was 5,000,000 yen, only half paid, was subscribed by the government to the amount of 1,000,000 yen.[2] The ratio of the silver coins to gold was fixed for a time by the authorities, but the system did not

[1] The Yokohama Specie Bank had deposit balances at the close of 1905 of 110,295,323 yen and 1713 other banks 657,292,232 yen.—*Financial and Economic Annual of Japan, 1906*, 142.

[2] *The Post-Bellum Financial Administration of Japan*, 246.

give satisfaction, and an ordinance was issued by the Formosan administration in July, 1904, authorizing the bank to issue notes redeemable in gold, and suspending the legal tender quality of the silver yen. The limit of authorized circulation not covered by gold is 5,000,000 yen. Notes beyond this amount not fully covered are taxed at the rate of five per cent. The law governing the bank was revised in February, 1906, bringing its organization and the monetary system of the island into conformity with those of Japan.[1]

The Monetary System of Korea.

The national money of Korea was originally copper, but its extreme bulk led to the gradual introduction of Japanese silver, even while Japan was on the silver basis. The demand for coined silver when the forces of the powers were seeking to rescue their legations in Pekin in 1900 caused the exportation of Japanese yen to China and almost denuded Korea of money. The void was soon filled by Japanese paper, which practically put Korea upon the gold basis.[2] Under the agreement of August 22, 1904, which confirmed the Japanese protection already established over Korea in 1895, the latter country agreed to accept a Japanese financial adviser as well as a diplomatic adviser.[3] The work of financial reform was promptly inaugurated by the withdrawal of the old nickel coins and the substitution of a complete system of gold, silver, and subsidiary coins based upon the Japanese system. By the close of 1907 it was estimated that not over 2,000,000 in the old pieces remained in circulation, while new coins had been issued to the amount of 5,327,000 yen, of which 4,024,300 yen had been put in circulation.[4]

The Koreans long employed an interesting system of promissory notes which acted in some degree as a substitute for currency. They were simple in form, stating only the amount, date of payment, and name of the drawer. The

[1] *Financial and Economic Annual of Japan, 1906*, 150.
[2] Méliot, *Dictionnaire des Monnaies*, 125.
[3] *Statesman's Year Book for 1908*, 1224.
[4] *Financial and Economic Annual of Japan, 1908*, Appendix, 4.

note was cut into two pieces, left in the hands of the drawer and the payee, and payment was made after the genuineness of the note had been ascertained by collating one piece with the other. As these notes could be issued without restrictions, the system led to abuses, which were rectified in 1905 by a code of regulations for promissory notes and note associations. These regulations limited the issue of such notes to regularly organized associations, which were made arbiters of their genuineness. These regulations were modified in November, 1906, so as to permit the use of checks and bills of exchange and to modernize the form of the note. The Seoul Note Association, which was formed in January, 1906, contained in 1908 230 members and had issued up to the close of February 2,355,092 yen ($1,177,500) in notes, of which 433,850 yen were outstanding. Five similar associations in other cities brought up the total issue to 5,380,046 yen ($2,690,000), of which 4,404,006 yen had been paid off and 976,040 yen were still outstanding.[1]

The actual currency circulation of Korea is furnished by the First Bank of Japan under an Imperial ordinance of March, 1905. This bank is one of the largest of the joint-stock banks which survived the reorganization of the Japanese monetary system. The bank has no authority to issue notes in Japan, and its circulation in Korea is covered partly by specie and partly by securities. The highest denomination of notes is ten yen ($4.98), and the lowest ten sen (five cents). The amount was increased after the full inauguration of the gold standard, rising from 3,371,817 yen at the close of 1904 to 9,224,400 yen in 1906 and 12,465,300 yen ($6,232,500) in 1907. The reserve at the close of February, 1908, consisted of 3,816,212 yen in specie and 6,779,288 yen in securities.[2]

[1] *Financial and Economic Annual of Japan, 1908*, Appendix, 8.
[2] *Ibid.*, 5.

CHAPTER XXI.

BANKING AND EXCHANGE IN THE ORIENT.

Difficulties in Exchange in Silver Countries Caused by Fluctuations in the Gold Value of Silver—Relief Sought by Adoption of the Gold-Exchange Standard — Successful Evolution of the Plan in Java—The More Difficult Problem in British India—Suspension of the Rupee Coinage in 1893—Success of the Policy of 1898—The Indian Banks—The Gold-Exchange Standard in the Philippine Islands—The Exchange Problem in Hong-kong and the Straits, China, Siam, and French Indo-China.

THE conditions of banking in the Orient were dominated for more than a generation by the fluctuations in the gold value of silver and by the importance which this fact gave to exchange relations with gold countries. The most important banks derived their profit for many years from these fluctuations in rates of exchange rather than from commercial discounts. Their interests ran counter to some extent to those of the business community, whose operations in the import and export trade were constantly exposed to hazard by the uncertainty as to what would be the gold value of silver obtained for imports from gold countries and what would be the silver value of gold obtained for exports to gold countries. The almost uninterrupted fall in the gold value of silver from 1873 to 1903 not only caused many difficulties in trade, but tended gradually to check investments of capital from the wealthy gold countries.[1]

[1] This subject is more fully discussed in the author's *Principles of Money and Banking*, under "The Dislocation of the Exchanges," I., 339, *seq.*

This evil of the dislocation of the exchanges was recognized by the English Gold and Silver Commission in 1888, when silver had already fallen in gold value from an average of $59\frac{3}{16}$ pence in 1873 to $42\frac{7}{8}$ pence in 1888. The disadvantages resulting from these conditions led to a series of measures by the Caucasian governments having interests in the Orient which largely corrected the evils of fluctuating exchange and wrote a new chapter in the history of monetary science. The Dutch in Java were the first to put in operation in 1875 a system for ensuring stability of exchange with Europe. The British attacked the much greater problem of giving stability to the mass of hundreds of millions of silver coins in India, first in 1893 and finally more completely in 1899. The United States attacked the same problem in the Philippines in 1901 and solved it in 1903 by a measure which represented the most advanced development of what came to be known as the gold-exchange standard. The Philippine experiment became a model for Mexico in 1904 and Panama in the same year, and was partly followed by the British in the Straits Settlements and by the French in Indo-China.

The fundamental principle of the gold-exchange standard is the maintenance of silver coins at parity with gold, without reference to their bullion value, by restriction of the quantity to the requirements of local trade and by the sale of bills of exchange at legal gold parity, plus such legitimate charges for exchange as prevail between gold countries. This is practically what was accomplished, with some variations of detail, in most of the silver-using countries of the Orient, except China, between 1897 and 1906. The earlier experiment in Java, although eminently successful, was not at first adopted as a guide in other countries because of the limited area in which it was tried and the process of evolution by which it grew up.

The Bank of Java.

The bank-note circulation of the Dutch East Indies, of which the Island of Java forms the most important part, is

furnished by the Bank of Java. The bank was founded in 1828, with a capital of 6,000,000 florins ($2,400,000), but the chief interest of its history to the Western World is the success with which it has maintained the gold standard in Java since the suspension of free coinage in Holland in 1875. The situation in Java has been in many respects the same as in the mother country, but the experiment is one which might have seemed more precarious because of the situation of Java in the midst of silver standard countries and the almost entire absence of gold in the reserves of the bank. Silver was for many years the legal standard of Java, but the government of Dutch India continued for a considerable time, beginning in 1818, to make the bulk of its payments in copper. This resulted in driving silver from circulation and led to the introduction of paper currency to represent the copper coins.[1] In 1875 the Bank of Java was empowered to regulate its operations according to the principles on which the Bank of Holland was working. A bill was brought forward and passed in 1877, by the Dutch Ministry, for the regulation of the currency of their Indian possessions. The principal features of this bill were the establishment of the double standard on the same basis as in Holland,—the formal suspension of the further coinage of silver.

The parity of the notes of the Bank of Java and of the silver coins is maintained through the foreign exchanges. All commercial operations with Holland or other countries in Europe are settled by bills drawn on Amsterdam or London, and the exchange has shown an extreme fluctuation never greater than five and a quarter per cent. on Amsterdam and six per cent. on London. Since 1885 the fluctuation has not been greater than three per cent. The bank rate has varied from nine per cent. for a time in 1876 to as low a rate as four per cent. in 1878 and in 1886. The mean rate in 1906 was 4.5 per cent. Settlements for merchandise balances between Holland and Java are made by shipments of silver. These shipments are taken up at home by the Bank of the Netherlands against bank-notes or credits at

[1] London *Bankers' Magazine*, March, 1893, LV., 383–91.

par with gold.[1] There was an industrial crisis in Java in 1886, which was attributed in some quarters to the maintenance of the gold standard of wages and prices, but the planters adopted improved methods of production and recent years have been years of prosperity.

From 1861 to 1908 the highest course of exchange was 12.17 florins and the lowest 11.35 florins, par being 11.91.[2] The note circulation of the bank was 58,451,000 florins ($23,380,000) March 31, 1906, and the metallic reserve was 30,867,000 florins ($12,347,000).[3] The circulation was substantially unchanged in 1908, but the metallic reserve had risen to 37,710,299 florins. Discounts were 14,317,783 florins. The reserve is required to be not less than forty per cent. of demand liabilities, and three-fourths must be in standard coins. The bank has a monopoly of note issue in Netherlands India, and its notes are received at public offices in the absence of contrary instructions on the part of the Governor-General, but they are not legal tender between individuals.[4]

Banking in India.

The issue of circulating notes through the medium of banks was brought to an end in India in 1861, but prior to that date there was a flourishing system of banks of issue. Banking in India in the early days of European supremacy was subject to no fixed regulations. The bulk of the business was transacted for many years by the "agency houses," founded by civil and military employees who had retired from the active service of the East India Company to go into private business. They made loans to the company at a high rate during the latter part of the last century, but the rate had fallen by 1813 to six per cent. and the debt had

[1] Letter from Mr. Van den Berg, *Report of the Indian Currency Committee*, Sen. Misc. Doc. 23, Fifty-third Cong., 1st Sess., 573.

[2] *Économiste Français*, July 25, 1908, 130.

[3] *Jaarcijfers Voorhet Koninkrijk der Nederlanden, Kolonien, 1905*, 82.

[4] Van den Berg, *The Money Market and Paper Currency of British India*, 44.

risen to £27,000,000. Some of these houses became very powerful, but large investments in industrial establishments, which suffered many failures in 1828, 1829, and 1830, caused their downfall. The total liabilities of the six agency houses which failed from 1830 to 1834 were estimated at over £17,000,000 and one of the largest paid little more than three per cent.[1]

The era of responsible banks began after the crisis. The Bank of Bengal had been founded as early as 1809, but its charter was renewed in 1840; a charter was issued in the same year to the Bank of Bombay, with a capital of £525,000; and a charter was issued in 1842 to the Bank of Madras. The private banks had been allowed to issue notes and this was true also of the Union Bank of Calcutta, founded in 1829, and the Bank of Agra. The Bank of Bengal in 1834 refused to receive the notes of the Union Bank or any of the new concerns, and the Union Bank went down in the crisis of 1846. The Bank of Western India was founded in Bombay in 1842, opened branches in Calcutta, Ceylon, and Canton, and became the Oriental Bank in 1845. This bank seems to have inaugurated the business of circuitous exchange, and encountered the unsuccessful hostility of London houses and the East India Company when it sought a royal charter in 1850.

The discovery of gold in Australia led to the projection in London of many new banks for foreign business, but it soon appeared that there was already a sufficient banking capital invested in India. The Bank of Bombay found legitimate discount business so dull that the directors endeavored to obtain a modification of their charter which would permit them to engage in exchange business in and out of India. The directors proposed, if this were granted, that the limit of note issues should be reduced from £2,000,000 to £1,000,000. The actual circulation was only £400,000, and the government refused to assent to the proposal.

The banks of the three great presidency towns had a cir-

[1] J. W. MacLellan, in London *Bankers' Magazine*, January, 1893, LV., 55.

culation in 1860 amounting to £2,241,471, with current accounts of only £1,855,293. The circulation increased by the spring of 1861 to £3,081,599, of which £1,851,627 was issued by the Bank of Bengal, £1,006,460 by the Bank of Bombay, and £223,512 by the Bank of Madras. Each bank was required to keep in its vaults cash equal to one-fourth of all outstanding demand liabilities. No complaint had been made up to this time of the manner in which these banks conducted their business, but it was thought that a profit might be made by the government out of the issue of notes.[1] The proposition to take the power of issue away from the banks was discussed as early as April 27, 1859, in a despatch from Lord Canning, and was embodied into law in 1861. The record of the banks was less creditable after the loss of the power of note issue. The Bank of Bombay, which had been so carefully conducted for twenty years that its gross losses were computed at only £2,500, obtained a new charter in 1863, sweeping away most of the restrictions on its operations and permitting an increase of the capital by June, 1864, to £2,090,000. Another crash came in 1866, following the news of the failure of Overend, Gurney, and Co., in London, and the Bank of Bombay lost in three years £2,046,898, and was compelled to wind up.[2] A new Bank of Bombay was formed, and in May, 1868, the liquidator stated that £1,889,993 of the capital of the old bank had been lost. The great presidency banks are still important factors in the financial affairs of India and usually hold in their reserves from 3,000,000 to 4,000,000 rupees in government notes.

The power to issue notes was withdrawn from the three banks by Act XIX., of 1861, and a paper currency established under government supervision, upon substantially the same basis as that of the issue department of the Bank of England, if entirely separated from the banking department. Some changes were made in the law in 1893, but they were principally such as were required by the suspension of the free coinage of silver. The circulation based

[1] London *Bankers' Magazine*, April, 1893, LV., 548.

[2] *Ibid.*, February, 1893, LV., 223–24.

upon securities was first fixed at 40,000,000 rupees, which was advanced by successive stages of 20,000,000 rupees in 1882, 1890, 1896, and 1905, until it stood on the last date at 120,000,000 rupees ($38,800,000).[1] The new notes were to be issued through "circles of issue," which were at first established only at Calcutta, Madras, and Bombay, but were from time to time increased in number. The minimum denomination, first fixed at ten rupees, was reduced in 1871 to five rupees. The notes are legal tender within their circle of issue and are redeemable in rupees. By an act of 1898 the issue of currency notes on the security of gold deposited in England was authorized up to July 21, 1900. This act was afterwards extended and in 1902 was made permanent.[2]

The average circulation of paper currency for the five years ending March 31, 1896, was 282,440,000 rupees; for the five years ending with 1901, 265,390,000 rupees; for the five years ending with 1906, 361,800,000 rupees. The average for the year 1905 alone was 392,000,000 rupees; for 1906, 415,200,000; for 1907, 451,400,000; and for the eleven months ending with February, 1908, 473,600,000 rupees. A considerable proportion of these notes is held in Treasury offices and bank reserves. Making allowance for these, the average in the hands of the public was for 1905, 306,900,000 rupees; for 1906, 328,300,000; for 1907, 359,200,000; and for the eleven months ending February 28, 1908, 366,100,000 rupees ($119,300,000). The maximum of the last named year was 381,400,000 and the minimum 351,700,000 rupees. Redemptions, including those accomplished by the transfer of notes between Treasury branches, are much more rapid than for the paper money of the United States, having reached

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[1] Chalmers gives the credit of the original act of 1861 to James Wilson, then Financial Secretary to the Government of India, and says that it was mainly based on the Imperial Bank Acts, 1844-45, though adapted to the conditions of British India by making a government department the representative of the "Issue Department" of the Bank of England.—*History of Currency in the British Colonies*, 346.

[2] *Commercial and Financial Statistics of British India, 1907*, 267.

1,002,336,925 rupees during 1895, or more than three times the circulation. The new currency has possessed perfect security and has obviated the necessity for large transfers of silver coin, but it has lacked the element of elasticity and has restricted the expansion of banking business in India. The total liabilities of the three banks which formerly issued notes have increased in no such proportions as the liabilities of banks in other countries, and interest rates in India have averaged much higher than in countries possessing a banking currency.

The period of banking expansion throughout the world, however, which began about 1897 was not without influence in British India. The capital of the three Presidency banks is 36,000,000 rupees, but they find strong competitors in the exchange banks and other joint-stock banks. The total deposits of all classes of banks on March 31st increased from 284,121,180 rupees for 1896 to 508,957,601 rupees for 1905, of which the share falling to the Presidency banks was 129,228,296 rupees for 1896 and 222,636,961 rupees for 1905. The exchange banks had deposits on the latter date of 170,490,725 rupees and other joint-stock banks 115,829,915 rupees. The liabilities of the three Presidency banks on June 30, 1908, were for the Bank of Bengal, 230,045,086 rupees ($75,700,000); for the Bank of Bombay, 112,905,756 rupees ($36,690,000); and for the Bank of Madras, 63,806,760 rupees ($20,735,000). Private deposits at the Bank of Bombay were 170,105,245 rupees; at the Bank of Bengal, 79,476,453 rupees; and at the Bank of Madras, 46,907,349 rupees.[1]

So considerable was the increase in the funds held against outstanding currency notes, as the result of the deposit of gold and rupees in the paper-currency reserve, that the Paper-Currency Act of 1905 authorized the transfer of a part of this reserve to London. The result was the remittance during the fiscal year 1906 of £7,045,000, where the gold was put in the vaults of the Bank of England. There was

[1] London *Bankers' Magazine*, September, 1908, LXXXVI., 395-96.

some criticism of the "earmarking," or locking up of so much gold; but it was explained by the Indian Government that the obligation to hold it exactly corresponded with the gold held by the Bank of England against its note issue; that it was equally withdrawn from the market, whether held in London or Calcutta; and that its purpose would not be served by an ordinary banking deposit at the Bank of England.[1] The benefit of the change was found largely in having the gold promptly available to purchase silver for the rupee coinage.

The history of the monetary system of British India is interesting chiefly because of the great experiment conducted there since 1893 in maintaining a silver currency at par with gold without a gold circulation. The decline in the gold value of silver, which began to attain momentum in 1866, was keenly felt in India because of her large trade relations with Great Britain, the fact that the receipts of the Indian Government showed a steady shrinkage in gold value, and the increasing burden of the charges on the debt, which were payable principally in gold. As early as 1876 commercial bodies in Bengal and Calcutta urged upon the government the temporary suspension of silver coinage, but received the reply that up to that time there was "no sufficient ground for interfering with the standard of value," and that if public revenue became impaired the difficulty would be remedied by increasing taxes or reducing expenditures.[2] But exchange relations with Europe went steadily from bad to worse, until at length in 1893 a commission headed by Lord Herschell recommended a radical change.

The effort was made, as the result of an exhaustive report by the commission, to give to the silver rupee a fixed gold value of one shilling four pence, representing about 32 cents in United States currency, as compared with a nominal value of about 48 cents when the ratio between silver and gold was 15 to 1. Reliance was placed in the first instance upon the closing of the mints to free coinage and the offering of

[1] *Indian Financial Statement for 1906-07*, 19.

[2] Alglave, in *Questions Monétaires Contemporaines*, 605.

Council bills in London, drawn upon the Indian Treasury, at about the legal exchange, subject to the usual charges between gold countries.

The Currency Act of January 26, 1893, provided for the closing of the Indian mints to the coinage of both gold and silver on private account, the government retaining the power to coin silver rupees on its own account. Arrangements were made at the same time for the receipt of gold at the Indian mints in exchange for rupees, at 16 pence per rupee; for the issue of currency notes in India for gold coin or bullion at the same rate, and for the acceptance of British sovereigns and half sovereigns for government dues at the rate of 15 rupees to the sovereign. It was anticipated that the closing of the mints would in itself give to the Indian Government control of the exchange, by limiting the means of obtaining currency in India to the purchase of Council bills offered by the Secretary of State for India in London; but this proved a fallacy.[1] While the reduction of the stock of currency in relation to the growing demand of business conditions in India could not fail ultimately to raise its value, it was a process which would require time for its fulfilment.

Council drafts were indeed offered in London at 16 pence, but they found no buyers and ultimately the government was compelled to sell them for what they would fetch. The rate in 1893 averaged only 15 pence and fell in 1894 to 14½ pence and in 1895 to 13 pence. In the meantime the entire cessation of coinage created severe stringency in Indian money markets, where the minimum rate at the Bank of Bengal was 10 per cent. in January, 1898, and rose on February 24th, to 12 per cent. There was some relaxation in these rates after June 16, 1898, and the rate for the busy

[1] *Cf.* Probyn. It was not till seven months after the mints were closed that the government abandoned the attempt to maintain exchange at sixteen pence, and an eminent economist went so far as to make the naïve inquiry whether they would not "move the rate of exchange to the position it held till 1872, in which year the average rate obtained for Indian Council bills was 1 shilling 11.125 pence.—*Indian Coinage and Currency*, 67.

season of 1898–99 did not exceed 7 per cent.[1] It became evident, however, to the government, that reliance could not be placed entirely upon starving the circulation in order to bring the rupee coinage up to the legal parity. Accordingly a new commission was appointed in October, 1898, which made a careful report on July 7, 1899, in favor of taking additional steps to ensure the equal value of the rupee coinage with gold. The chief measure which they recommended was that the English sovereign should be made a legal tender and a current coin in India and that gold should be freely coined at the Indian mints on private account.[2] The first part of this programme was adopted by the government.

But events now began to bring about what legislation alone had proved insufficient to accomplish. The rate for Council bills in London, which had improved only slightly in 1896, was 14½ pence in 1897, and 15⅝ pence in 1898. While the special commission was sitting, the rate moved up to parity at 16 pence and gold began to be deposited for rupees and currency notes. By March 31, 1899, the gold which had accumulated in the reserve was £2,035,448 and in another year amounted to £9,291,019 ($45,300,000), including £1,500,000 deposited in London. From that time the success of the project of maintaining a fixed exchange with gold countries was assured, and as the demands for rupee currency grew in India the gold-standard reserve, which had been separated from the currency reserve, rose in March, 1906, to £12,262,700 and in March, 1908, to £18,355,300. This amount is exclusive of the currency reserve, held against outstanding paper notes, which contained in 1906 £11,575,400 in gold coin and bullion.[3]

The gold standard was thus established as firmly in India as in England or France, and subsequent events showed that the new system was capable of enduring the shock of a

[1] *Report of the Indian Currency Committee of 1898, Commission on International Exchange, 1903*, 305.

[2] *Commission on International Exchange, 1903*, 317.

[3] *The Gazette of India*, March 21, 1908, 754.

crisis with as little disturbance as the monetary and banking systems of Europe. When currency is needed gold flows into the gold-standard reserve and is employed in buying silver for coinage; when currency is not needed, exchange on London is bought with rupees and the rupees are thus withdrawn from circulation.[1] A new chapter in monetary science was thus written by the history of India. With a circulation of silver estimated at 1,800,000,000 rupees ($603,000,000), grave apprehensions were felt in many quarters of the possibility of maintaining such a volume of currency at par without a large loan; but the test of experience showed that those who believed in the efficacy of an exchange fund and in the limitation of new coinage to the amount paid for in gold, rested upon an unassailable principle of economic science.[2] The Philippines, Mexico, and Panama were prompt to follow in the path thus marked out by India.[3]

It was natural that an experiment so vast and comparatively novel should be conducted with deliberation by the Indian Government. One of the most serious difficulties of the plan up to 1899 was the undue limitation in the issue of the silver rupee, the current money of the country. From 1893 to March 15, 1900, not an ounce of silver was purchased for coinage nor an additional rupee added to the circulation, except those which came out of hoards under the stimulus

[1] Robertson declared as long ago as 1903 that "There is no more interference with the automatic character of the currency in India than there is in England."—*Commission on International Exchange, 1903*, 372.

[2] Great stress was laid by Sir James Westland, in criticising the plan for an exchange fund in London carefully worked out by Mr. A. M. Lindsay, upon his belief that the plan "would involve the undertaking of an indefinite liability."—*Commission on International Exchange, 1903*, 352.

[3] M. Arnauné disputes the parallelism sometimes drawn between the silver dollars of the United States and the five-franc pieces of France with the Indian rupee, upon the ground that the American and French coins are part of a circulation whose basis is actual gold, while the rupees are not merely secondary coins, but constitute in themselves the principal money of India.—*La Monnaie, le Crédit et le Change*, 162.

of a higher value in circulation than as bullion.[1] It was gradually realized that this policy was crippling the trade of the country. Hence Act No. VIII. of 1900 gave the Secretary of State for India power to purchase silver with the gold deposited at the mints and to transmit the silver to India for coinage. Act No. IX. of 1902 authorized the issue of notes in India against silver bullion held in England as a reserve against the notes. The acute need for circulation was shown by the purchase between March 15, 1900, and April 4, 1901, of 50,297,224 ounces of silver at a total cost of £6,055,175, at an average price of 28¾ pence per ounce. Purchases of silver, which were at first made irregularly, began to be made with considerable regularity in 1904. During the financial year ending March 31, 1906, the amount of silver purchased was £8,574,000, and the net increase in the rupee coinage from 1899 to 1908 was about 900,000,000 rupees ($293,000,000).

The reappearance of British India in the market for silver bullion, after having been entirely withdrawn from 1893 to 1899, had an influence upon the price of silver. The downward course of the metal, which prevailed almost without check from 1866, was not reversed by the purchases of the Indian Government in 1900; but in 1903 it was agreed with the American and Mexican commissions on international exchange, that greater regularity in purchases of the metal was "desirable and might be adopted as far as possible in each country, subject to its monetary policy and convenience."[2] If there was any hesitation in adopting this policy, it

[1] Evidence that some coins were drawn from hoards is afforded by the fact that coins of old coinages constituted in 1895 a considerably larger proportion of the amounts received at government treasuries than in former years.—*Report from the Head Commissioner of Paper Currency, 1895*, 39–42.

[2] *Commission on International Exchange, 1903*, 141. Subsequently Sir James Mackay, Chairman of the British Commission which adopted this resolution, in transmitting figures of further purchases to Mr. Hanna, Chairman of the American Commission, said: "I think you will observe from the prices which the Secretary of State for India paid for the silver which he bought that regularity has, as

was removed by the heavy demands which brought the Indian Government into the silver market in the next few years, and taxed the capacity of the mints. It was found advisable in 1905 to make an estimate of probable requirements at the beginning of each quarter, "and to spread both purchase and coining as far as possible over the whole twelve months." [1] Already it had been found necessary in the previous year to accumulate silver bullion in an ingot reserve, in order to have it immediately available for coinage. This stock of ingots became so important an element in the paper-currency reserve that a new step was taken in 1906, in transferring the ingot reserve to the gold-reserve fund and changing the name of the latter to Gold-Standard Reserve.

The change of name in the reserve fund was significant of the fact that the new system was so firmly established that the Indian Government considered it no longer necessary to keep the fund entirely in physical gold. The menace to the fund came no longer from the demand for gold, but from the demand for silver rupees. Hence the conclusions thus expressed in the spring of 1907 [2]:

> The primary object of the fund, now as formerly, is the effective maintenance of the gold standard, and its protection against whatever dangers may assail it. For this purpose it must always contain a large stock of gold or gold securities in a readily convertible form, on which we could draw in the event of the balance of trade turning against India and the Secretary of State being temporarily unable to find a market for his Council bills without forcing down exchange. Hitherto, however, this danger has not actually presented itself, whereas, on the other hand, we have more than once been confronted with a temporary deficiency in our stock of rupees and with a difficulty in procuring new ones with sufficient promptitude. It is equally legitimate to employ the reserve, by whatever name it be called, to provide against this danger also.

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far as possible, been observed, so as to prevent exchange fluctuations." —*Commission on International Exchange, 1904*, 497.

[1] *Indian Financial Statement for 1906-07*, 17.

[2] *Ibid.*, 25.

As gold was always available in considerable amounts in the paper-currency reserve, it was deemed prudent to put nearly the whole of the gold-standard reserve into securities, which in March, 1908, made up £14,019,700 of a total reserve of £18,355,300 ($89,500,000), the remainder consisting chiefly of rupees. The profit on new coinage credited during the previous year was £1,127,000 and from interest on investments £386,800.[1]

It remained to put to the test the capacity of the exchange standard to meet the conditions of a crisis. The opportunity for such a test came in 1907. The low price of jute had already affected the sale of Council bills in London before the crash came in New York in October. In September came an additional menace in the failure of a part of the wheat crop, which promised to reduce wheat exports to insignificance and prevent the usual creation of credits in favor of India. When America early in November "fell upon the world's supply of gold with all the insistence of panic," and the discount rate at the Bank of England was put up to seven per cent., the sale of Council bills became for the moment impossible and it was necessary to look about for other means of meeting demands upon the Indian Government in London. Exchange fell as low as $15\frac{1}{16}$ pence, or a discount of nearly two per cent.[2]

It was not the local needs of India which led at this time to pressure upon the exchange funds, but the discovery in London that India had a gold stock which might be laid under contribution for the needs of the harassed Western world. Inquiries were made whether sovereigns would be paid for rupees in India at the legal parity, with the avowed object of shipping the gold. After deliberation, the government declined to furnish gold at par in larger amounts than £10,000 to any individual on any one day. On November 25, 1907, however, the government released £1,000,000 of its gold held in London, and in December £1,500,000 more. It was also decided, after exchange recovered, that if it again

[1] Supplement to the *Gazette of India*, March 21, 1908, 754.
[2] *Ibid.*, 709.

fell below the gold export point, telegraphic transfers on London should be offered at a fixed rate.[1] No occasion arose at the time for putting this decision in practice. The release of gold in London was accompanied by a quick rise in rates for bills, which on November 30th stood at $15\frac{29}{32}$ pence.

The general crisis was only a few months passed when, in April, 1908, a crisis largely local to India developed from the failure of the crops and the excess of obligations abroad incurred by Indian merchants for their purchases in Europe. Again sterling drafts on London were offered freely by the Indian Government, and from March 26th to August 13th had been taken to the amount of £8,058,000. This extraordinary reversal of the usual movement of exchange was met by the sale of securities held in the Gold-Standard Reserve in London in order to find the gold to meet the drafts. Between March 31 and July 31, 1908, the amount invested in gold securities fell from £14,019,676 to £9,415,708, and silver held in the reserve fund in India mounted upward from £4,000,000 to £9,002,000.[2] Thus, the fund, from consisting of gold investments in the proportion of more than seventy-five per cent. came to consist of silver in the proportion of nearly fifty per cent.

The situation for the time was threatening, but the tide turned with the more favorable crop conditions of the summer of 1908. Jute and tea bills came forward freely, imports into India were reduced, and the silver coin in the gold standard reserve again began to be in demand; but purchases of bullion for new coinage were necessarily suspended for some time, with a depressing effect upon the market for silver. A special commission, appointed in 1913 to inquire into the management of Indian finances, made a final report on March 6, 1914. This report was favorable to the general scope and operation of the Indian currency system. It was recommended that the gold holdings in the gold standard reserve should be raised as soon as possible to £15,000,000 and that in future the proportion of gold held should be not less than one-half. It was recommended that gold held in

[1] Supplement to the *Gazette of India*, March 21, 1908, 710.

[2] London *Bankers' Magazine*, October, 1908, LXXXVI., 440.

the paper currency reserve should be exchanged for silver in the gold standard reserve, and that the amount of paper currency based upon securities should be increased. It was also recommended that any future profits derived from the coinage of rupees, together with the profits on the sale of council bills and transfers, should go into the gold standard reserve. The recommendations in this respect were intended to terminate the practice, adopted in 1907, of diverting half of the profits to the funds available for railway construction.[1]

Banking and Coinage System of the Philippines.

The Philippine Islands under Spanish authority had a bank of issue known as the Spanish-Filipino Bank (*Banco Español Filipino*), originally chartered in 1851 with a capital of 400,000 pesos. This capital was increased from time to time until by the revision of the bank statutes in 1897 it was fixed at an authorized maximum of 4,500,000 pesos, but this authority was availed of only to the amount of 1,500,000 pesos. The bank was authorized by the same decree to issue notes to three times the amount of its capital, but never reached this amount. Its organization was substantially that of a state bank, like the Bank of France and the Bank of Spain. The governor of the bank was appointed by the Governor-General of the Islands and representatives of the government participated in its affairs. By the decree of October 17, 1854, which first gave the bank distinctive official recognition, the right to issue notes in the Philippine Islands, payable to bearer, was made exclusive. The bank was subject, however, to the provisions of the commercial code, that banks should keep in cash in their vaults at least one-fourth of their deposits and note issues.

The standard of the Philippine Islands was gold, until the depreciation of silver expelled gold from circulation and brought into operation the silver standard. The currency used from the beginning was principally Mexican silver dollars, which originally came to the Philippines as the

[1] London *Bankers' Magazine*, April, 1914, XCVII., 591.

result of the curious political arrangement of the seventeenth century, by which the Islands were made a dependency of the Spanish establishment in Mexico. Through the gateway of the Philippines in part, Mexican dollars found their way throughout the Orient, so that until the adoption of the gold standard in Japan in 1897, the Islands enjoyed a common currency with China, Japan, and the English and French dependencies in the East. At the time of the revision of the bank charter in 1897, the Spanish Government coined for use in the Philippines new silver pesos bearing Spanish inscriptions and of considerably lighter weight than the Mexican coins, but the two circulated practically side by side at par and the Mexican coins remained the standard.[1]

At the time of the American occupation of the Islands in 1898, and especially after the restoration of civil government in July, 1901, currency and banking conditions were much confused, owing to the fact that the silver had declined to about one-half its nominal value in gold at the old coinage ratio and that much American money had been introduced into Manila and other centres of population by American troops and officials. For a time, and down to the campaign of the Western powers to rescue their legations at Peking, in 1900, the American Government was able to maintain approximately a ratio of value of two Mexican dollars (or pesos) for one American dollar. This ratio broke down to a large extent, because the presence of the allied armies caused such a demand for currency in China that the value of Mexican dollars rose. In less than three months, in the autumn of 1900, more than 3,000,000 pesos were exported from the Philippines, and the city of Manila and other commercial places were almost denuded of currency.[2] The American Government sought to check the outflow by pro-

[1] These local coins were of the weight of a Spanish piece of five pesetas, but of the fineness of 0.835. For a more minute account of changes in coinage policy under Spanish rule, see *Report of the Philippine Commission*, January 31, 1900, Sen. Doc. 138, 56th Cong., 1st session, I., 142–48.

[2] Détieux, *La Question Monétaire en Indo-Chine*, 261.

hibiting exportation, but as American money declined to $1.95 in Mexican a new element of disturbance arose in the fear of the natives that it might continue to fall.[1]

The result of these conditions was a special investigation, under authority of the War Department, which resulted ultimately in the Act of March 2, 1903, establishing a gold-exchange standard in the Philippines.[2]

The principle of the gold-exchange standard as adopted in the Philippines was not unlike that of the system of British India after the changes of 1898, but in the Philippines conditions were much easier to control and the system was given a more definite and permanent form. When the amount of silver circulation becomes redundant, the redundancy is relieved by the sale on the part of the Treasury of drafts on gold deposits in New York, at rates only slightly in excess of the usual rates of exchange. This enables the holder of the coins to know that he can lay down their equivalent in gold in a foreign country, with only the usual charges for exchange, in substantially the same manner as he could export gold if gold were actually in circulation.[3]

The new system was introduced into the Philippines by the autumn of 1903, but the old coins were not entirely eliminated from circulation until an act had been passed by the Philippine Commission, imposing taxes on contracts and

[1] Details of these difficulties may be found in *Report of the Taft Philippine Commission*, January 25, 1901, I., 85–92.

[2] The author of the present work was designated by the Secretary of War to make this report and concurred substantially with the views of the Philippine Commission, that a gold-exchange standard should be established. There was division of opinion on the subject in Congress at the first session, in 1902, at which the report was submitted, which delayed action until the following session. See *Special Report on Coinage and Banking in the Philippine Islands, to the Secretary of War*, by Charles A. Conant, Washington, 1901.

[3] M. Détieux foresees a possible danger in this system, arising from an "unfavorable" balance of trade, which he believes would bring the local currency to the Treasury to buy foreign drafts because there was an insufficiency of offerings of commercial bills and might thereby impose a serious strain upon gold reserves.—*La Question Monétaire en Indo-Chine*, 281–83.

on bank deposits expressed in the old currency.[1] The purpose of this legislation was to overcome the effects of Gresham's law, under which persons having debts to pay or purchases to make would give their preference to the old currency, because it was cheaper than the new in gold. The new legislation so effectively accomplished its purpose that Mexican currency began gradually to leave the Islands considerably before the day for the enforcement of the tax, on October 1, 1904, and by that date had practically disappeared.[2]

The unit adopted by Congress for the Philippines was the silver peso, containing 416 grains of silver nine-tenths fine, which was approximately the equivalent of the Mexican silver peso. This was a larger amount of silver than was recommended originally, as it was desired to leave a considerable margin between the bullion value of the silver and its face value, in order to allow for fluctuations in the gold price of the metal. Silver bullion advanced so rapidly in price, however, after the efforts of the Commission on International Exchange in 1903 to bring about concurrent action of European governments in regard to their Eastern dependencies, that the Philippine peso became more valuable as bullion than its face value. The result was to cause some exportation of the coin, which was checked by an act of the Philippine Commission prohibiting such exportations. Subsequently an Act of Congress of July 23, 1906, authorized a reduction in the amount of silver contained in the peso and the commission provided for a coin containing 20 grams of

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[1] Act 1045 of the Philippine Commission, enacted January 22, 1904.—*Report of the Commission on International Exchange, 1904*, 308.

[2] The adoption of a legal coinage on a gold basis contributed to check speculation in different varieties of coins as well as fluctuations in the value of silver bullion. It was declared by Judge Ide, December 1, 1905, that "all business transactions are in the new, the speculating and gambling in coin which formerly prevailed to so large a degree being entirely done away with."—*Fourth Annual Report of the Secretary of Finance and Justice*, 18.

silver, eight-tenths fine.[1] This brought down the ratio between gold and the silver coin to about 22 to 1, or within the limits of the ratio of British India and Japan, so that if silver should rise materially in price it would encounter the bulwark of the great mass of silver in circulation in India before it would be able to go higher than the Philippine ratio.

In order to obviate the handling of money, certificates of deposit were authorized against the new silver coins, which were at first limited in denominations to one, two, and five pesos. Subsequently larger denominations were authorized up to 500 pesos, and in 1906 a further change was made—partly due to the rise in silver—by which gold might be held against the certificates to the amount of 60 per cent. of the total metallic fund. This required a change in the language of the certificates. The popularity of this paper circulation is attested by the fact that during the fiscal year 1907 certificates were shipped from the Bureau of Engraving and Printing to the amount of 27,000,000 pesos, and most of them were promptly demanded in circulation. The total silver coinage up to this time was about 40,000,000 pesos.

No general banking law was adopted by the American Government for the Philippines, except some provisions for inspection and reports, down to the summer of 1907. At that time a comprehensive revision was made of the statutes of the Spanish-Filipino Bank which put an end to some vexatious controversies as to the legal relations between the bank and the new government. As the bank was largely owned by the Roman Catholic Church, it was possible to combine an adjustment of the privileges of the bank with a settlement of title to certain lands and estates in Manila used for charitable purposes. The charter of the bank was extended to January 1, 1928, and its notes were made legal tender for public dues so long as they were redeemed in full in lawful money of the Islands. The bank renounced its claim to an exclusive privilege of note issue, and its issues were limited for the time being to 2,400,000 pesos ($1,200,-

[1] For weight and fineness of the new coins in grains, see *Finance Report, 1907*, 250.

000) based upon its capital and surplus, and 600,000 pesos based upon the deposit of securities with the Treasurer of the Philippine Islands. Power was given to increase note issues in case of increase of capital stock, but not in excess of 9,000,000 pesos. The notes based on capital and surplus were to be taxed at the rate of one-half of one per cent. per annum and those based on securities at the rate of one per cent.[1]

The total resources of the Spanish–Filipino Bank at Manila on March 31, 1908, were 9,285,444 pesos ($4,642,722), of which 3,401,928 pesos represented overdrafts (or debtor accounts), 675,903 pesos loans and discounts, and 3,401,928 pesos cash. The outstanding note issues were 1,365,450 pesos, and individual deposits 1,880,686 pesos. Capital stood at 3,000,000 pesos and surplus at 900,000 pesos.

While the Spanish–Filipino Bank is the only bank of issue in the Philippines, it is overshadowed in volume of business by the Manila branch of the Hong-kong and Shanghai Banking Corporation, whose resources on March 31, 1908, were 13,845,152 pesos ($6,922,576), and by the Manila branch of the International Banking Corporation with resources of 7,905,593 pesos ($3,952,796). The New York office of the latter corporation is one of the depositaries of the gold-reserve fund of the Philippine currency system.[2]

Banking in Hong-kong and the Straits.

The dominating banking forces in the East are several large banks financed by English capital, having their real domicile in London, but with branches scattered throughout

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[1] *Negotiations for the Settlement of Title to Certain Lands*, etc., 12–14. The agreement was perfected on June 8, 1907, at a dramatic meeting at the residence of General Clarence R. Edwards, Chief of the Insular Bureau, in which the present writer participated, as one of the advisers in regard to the changes in the bank charter. Secretary Taft and General Edwards were the chief representatives of the government, and Festus J. Wade of St. Louis and Father J. R. Chouza of the Manila Cathedral represented the church.

[2] *Report of the Comptroller of the Currency, 1907*, 415.

the Orient. Their operations are not confined to English dependencies alone, but extend to all parts of China where European enterprise has penetrated, to the Philippine Islands, to Japan, and to other countries. These banks are the Hong-kong and Shanghai Banking Corporation, the Chartered Bank of India, Australia, and China, and the Mercantile Bank of India. The first-named is by far the most powerful, and in many matters the others are content to work in harmony with its policy. The Mercantile Bank is less active in China than the Chartered Bank, but is an active factor in the Straits Settlements.

The Hong-kong and Shanghai Banking Corporation was established by a local ordinance of the Hong-kong Government in 1866, with a capital of $2,500,000. Being thus of Eastern origin, its accounts are stated in Mexican dollars, without regard to their fluctuations in English gold. Notes were issued in Hong-kong, in Shanghai, in the Philippine Islands, and in the Straits Settlements, but have been gradually withdrawn in the Philippines since the issue of coin certificates by the Philippine Government. The shareholders of the bank are subject to unlimited liability for the note issues, but the cash reserve of the bank may be kept exclusively in Hong-kong and a premium charged for the redemption of notes at any other office than that where they are issued. The original reserve requirement was specie to at least one-third of the circulation, and the banks other than the Hong-kong were required to keep specie in this proportion at each office where notes were issued.[1] At present the Hong-kong Bank deposits securities and coin with the Crown agents for the colonies and their trustees to the amount of $15,000,000 and deposits coin in full with the Hong-kong Government for issues in excess of this amount.[2] The bank is allowed to issue notes of the denomination of $1 as a substitute for handling the heavy silver.

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[1] Chalmers, 379.

[2] London *Bankers' Magazine*, April, 1908, LXXXV., 631.

The capital of the Hong-kong Bank has been several times increased. The last increase was from $10,000,000 to $15,000,000 in 1907. There is a sterling reserve fund, computed at two shillings to the dollar, of $15,000,000, and a silver reserve fund of $13,000,000. While the transactions of the bank have not increased rapidly in recent years, the assets have reached the large total of approximately $300,000,000. Deposits and current accounts, which at the close of 1902 were $220,692,315, declined for 1906 to $199,209,882, but recovered on December 31, 1907, to $224,077,166. Bills payable, including drafts on London, were $11,475,783. The assets on December 31, 1907, included bills receivable, $118,006,643; discounts and loans, $101,598,165; and cash, $40,508,887.[1] Net profits, which were computed at $3,145,806, are converted into payments to the British shareholders at a much lower rate in gold than when silver was nearer the old legal parity. The bank was able, however, to declare for 1907 a dividend of £2 upon the old shares and £1 10*s.* upon the new shares, covering the period for which they had been issued. The par value of the shares is $125, but so large have been the profits of the bank that even the great depreciation of silver has not prevented their rise to a price of about £100.[2]

The Chartered Bank of India, Australia, and China increased its capital in 1907 from £800,000 to £1,200,000, and showed a reserve fund of £1,475,000.[3] Its assets on December 31, 1907, were £21,075,231, or something over two-thirds those of the Hong-kong Bank.[4] Outstanding issues of notes were £659,915; current accounts and deposits, £12,288,731; and bills payable, £1,351,600. Current accounts and deposits rose from £9,958,344 at the close of 1902 to £13,204,-

[1] London *Bankers' Magazine*, May, 1908, LXXXV., 718.

[2] *Ibid.*, May, 1907, LXXXIII., 719.

[3] *Ibid.*, May, 1908, LXXXV., 770.

[4] Since the decline of silver to about two shillings to the Mexican dollar, it is necessary to multiply sterling figures by ten in order to reduce them to dollars for comparison with those of the Hong-kong Bank.

594 for 1906. Cash on hand at the close of the year was £2,070,231 for 1902, £3,063,173 for 1906, and £2,761,781 for 1907. The dividend declared for 1902 was ten per cent., which was advanced for 1904 to eleven, for 1905 to thirteen, and for 1907 to fourteen per cent.[1] The Mercantile Bank of India had a paid-up capital at the close of 1907 of £562,500 and assets of £6,156,772.

A large share of the business of Oriental banks is based on exchange with gold countries, especially with London. This business became very profitable to the banks as silver declined in value, but a source of embarrassment and loss to traders. Exporters protected themselves in a measure by making "forward" contracts for exchange—that is, when they knew that they would have shipments to make, for which they would be entitled to sell bills upon London in sterling, they would contract in advance with a banker to accept these bills at a certain rate in silver. They would then be in a position to determine the silver price at which they could produce or buy the goods for export at a profit. If silver declined in gold value, they were fully protected by their exchange contract. The banks sought protection by contracts for forward sales of bank paper and by the high rates they charged for the risks assumed.[2]

The difficulties of exchange became especially acute after the crisis of 1893 in the Straits Settlements, where the port of Singapore constituted the entrepôt of international trade. The Governor of the Settlements was accordingly authorized in 1893 by the British Colonial Secretary to appoint a special committee to suggest remedial measures. This committee disagreed and nothing came of its efforts. The same fate befell the plan for a gold-exchange standard adopted by the Singapore Chamber of Commerce on August 25, 1897. This plan, while proposing the adoption of a new silver dollar to have the gold value of two shillings, had

[1] London *Bankers' Magazine*, June, 1908, LXXXV., 858.

[2] *Cf.* Kemmerer, *Political Science Quarterly*, December, 1906, XXI., 671.

defects of detail which made it impracticable.[1] The criticism which it aroused postponed action until 1902, when another sharp fall in silver caused new derangement to the exchanges. A committee was then appointed by the home government, headed by Sir David Barbour, which completed its report in May, 1903.

This committee recommended that a special silver dollar be coined for the Straits, of 416 grains, nine-tenths fine, which should be gradually substituted for the Mexican and the British dollar, which had been formerly coined. When a supply of the new dollars had been received, the importation of the old coins and the exportation of the new should be prohibited. It was proposed that the new dollar should be raised by scarcity to a gold value to be fixed at a later date and that when this stage was reached the new coins should be first given at a fixed rate for gold and eventually that gold should be given for silver, so long as gold was available, or bills should be given on Crown agents in London, based on the fixed rate of exchange.[2] This plan was adopted by the Legislative Council on May 29, 1903. The new dollars began to reach Singapore early in October and were put in circulation through the banks.

The failure to prescribe a definite gold value to be ultimately attained by the new coin led to perturbations, which were perhaps intensified by the unexpected rise of silver. It had been the general expectation that the value of the new coins would be fixed ultimately at two shillings, but the rise in silver made it evident that such a valuation—about four per cent. below that of the Philippine coins of similar weight—would soon send them to the melting pot. Hence began a violent speculation in exchange for a higher gold value, which was terminated only when the Governor in Council finally, on January 29, 1906, fixed the exchange value of the dollar at 28 pence, or at the rate of \$60 for £7.[3]

[1] *Cf.* Kemmerer, *Political Science Quarterly*, December, 1904, XIX., 638–40.

[2] *Commission on International Exchange, 1903*, 289.

[3] The story of the speculative operations is graphically told by

Notes based upon the new coins were offered by the government for gold, and in September, 1906, tenders of gold began in considerable amounts. The ordinance of January, 1906, prescribed that the future profit on the minting of Straits dollars should be carried to a separate gold-reserve fund, and a run for silver, in case it rose above the legal parity, was guarded against by an ordinance of October 22, 1906, compelling the holder of notes to accept gold at the option of the government instead of silver. An order of the same date accepted the policy already adopted in the Philippines, by authorizing the Governor to reduce the fineness of the silver coins from nine-tenths to eight-tenths.[1]

In Hong-kong the introduction of the gold standard has been much discussed, but generally upon the basis of its introduction in China. The unsuccessful efforts made early in the history of the Colony to introduce the British monetary system taught the lesson that it was not feasible to maintain a system different from that of the great country of which Hong-kong was geographically a part.[2] Even the effort to coin a distinctive British dollar was not successful in 1865, but the experiment which was renewed in 1895, when Mexican dollars had become scarce and the Indian mints were idle, gave better results. By the close of the fiscal year 1903 the new dollars had been coined to the amount of $151,361,594, and had found their way into all parts of the Orient remaining on the silver basis, where the Mexican dollar still circulated.[3]

Banking in China.

China has been slow in adopting European methods of banking, but possessed paper currency before it was known in any other part of the world. Silk rolls and cowries were

Kemmerer, *Political Science Quarterly*, December, 1906, XXI., 671–77.

[1] *Report of the Director of the (U.S.) Mint, 1907*, 199–201.

[2] Chalmers recounts some of these earlier failures—*A History of Currency in the British Colonies*, 374.

[3] *Cf.* Andrew, *Quarterly Journal of Economics*, May, 1904, XVIII., 340.

at one time money in China, and as late as the year 1206 A.D. silk was accepted in payment of the salt tax. The first issues of government paper are ascribed to the Emperor Hien-tsung of the Tang dynasty (A.D. 806–821). In view of the scarcity of cash, this ruler issued an edict prohibiting the manufacture of copper utensils and providing for offices in the capital at which merchants might deposit their coin and receive in exchange bonds or "flying money."[1] The notes were soon issued at various provincial capitals and were redeemable at the office of issue. It was in the State of Shuh, the present Province of Szechwan, that notes were first issued without a full metallic cover. Devised by Chang Yung, they were freely issued during the reign of Chengtsung of the Sung dynasty (A.D. 997–1022) to obviate the inconvenience of handling the iron money then in use. They were known as *changelings*, were worth a tael of pure silver, and were redeemable once in three years.

The issue of irredeemable paper to defray government expenses began in the twelfth century and soon ran the usual course of depreciation and repudiation.[2] Under the Mongol Government a long series of paper issues occurred, beginning in the first year of Kublai Khan (A.D. 1260). The manner in which this paper currency was employed as a substitute for actual money was a source of admiring wonder to Marco Polo during his visit to the Khan's court. The first Ming Emperor, Hung-wu (A.D. 1368–98), was compelled to continue paper issues for a time, but eventually restored the use of specie.[3] Government paper issues ceased from the middle of next century until 1853, when two forms of notes were issued — those representing copper cash and those representing silver. They were forced into circulation by the Board of Revenue by paying them to officials as part of their salaries and by compelling the banks to accept them as the equivalent of money. They depreciated

[1] Morse, *Currency in China*, 18.

[2] Morse, 20.

[3] Morse gives reproductions of some of the notes used.—*Currency in China*, 26, *seq.*

rapidly and in 1861 were sold in the streets of Peking at a discount of ninety-seven per cent.

Private bank paper has long been known in China, and the guild of bankers is among the most powerful bodies of citizens in the Empire[1]; but this private paper circulates only within a short radius of the place of issue and is subject to no form of government supervision, except in case of failure. The government then steps in and often takes severe measures against the defaulters, extending in some cases to decapitation. Failures are rare, however, because of the co-operation which prevails among the Chinese bankers and the training which is derived from the hereditary character of the business. The notes issued are chiefly cash notes—*i. e.*, payable in copper cash,—but other forms of money are usually given when requested. The notes are usually payable on demand, but sometimes only a certain number of days after issue.[2]

Banking according to European methods was introduced gradually into China after the opening of the country to European and American trade in the middle of the last century. The Hong-kong and Shanghai Banking Corporation was one of the first to extend its operations beyond the British settlements into neighboring Chinese territory and has been followed by the Chartered Bank of India, Australia, and China, the Bank of Indo-China, the Yokohama Specie Bank, the Russo-Chinese Bank, and the German-Asiatic Bank. These banks are not regulated to any extent by the Chinese Imperial Government, but are all institutions of large capital, with many branches, and are under the protection which arises from the influence of the respective home governments of the interests which control them. They nearly all issue notes under authority of their home charters, which find their chief circulation in the treaty ports, but have filtered to some extent into the interior of China. They are issued for the most part in dollars, and are redeemable in the coin which they represent—the old

[1] *Cf.* Jenks, *Commission on International Exchange, 1904*, 49.

[2] *Ibid.*, 49–52.

Mexican dollar in Shanghai, the British dollar in Canton and Peking. Some few notes are redeemable in taels. The notes issued in one city are not universally received at par by the branches of the issuing bank in other cities.[1]

China's foreign trade has been subject, ever since the fall of silver, to excessive and violent fluctuations in rates of exchange. This fact has had a marked influence both upon mercantile activity and upon the character of banking.[2] The foreign banks established in the country are exchange banks, deriving the larger share of their profits from fluctuations in the gold value of silver and in the changing relations of supply and demand for Mexican dollars and other coins. The effect of a fluctuating standard was to make it impossible for them to embark European capital permanently in Chinese enterprises or to enter largely upon loans upon domestic transactions. While their capital, expressed in European gold money, constantly depreciated with the fall of silver, their profits increased in the case of notes, deposits, and other obligations payable in silver. Thus, their notes, issued when silver had a high gold value, became "drafts without any fixed maturity which the bank was able during a long term of years to allow to liquidate themselves by the fall in the metal which it had promised to pay."[3] Out of similar considerations grew their operations in exchange with Europe, by which they so efficiently protected themselves against the fall in silver that their transactions never failed in the long run to show a handsome net profit.[4]

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[1] Jenks declared that the discount is sometimes as high as five per cent.—*Commission on International Exchange, 1904*, 48.

[2] Jenks declares that the fluctuation in exchange "has made the import and export trade partake so much of the nature of gambling that, although some fortunes have been made, others have been lost through no fault of the merchants concerned."—*Commission on International Exchange, 1904*, 45.

[3] This definition is that of Dubois, in his interesting analysis of the character of the foreign banks in China and the reasons why this character has been almost inevitable.—*L'Empire de l'Argent*, 44.

[4] For earnings of the Hong-kong and Shanghai and the Chartered Bank, see *infra*, 592–93.

In spite of the success of the foreign banks, the influence of the fluctuations in exchange upon trade became even more acute than formerly after Japan and Russia adopted the gold standard in 1897 and after the sharp decline of silver in 1902. In the latter year there was much discussion among foreign residents in China regarding the practicability of adopting a gold-exchange standard on principles similar to those adopted in India and proposed for the Philippines. While such a project had many advocates, there was a feeling in British official quarters that it would be necessary to first diffuse throughout China a uniform silver currency in place of the great variety of coins in use before proceeding to give to such coins a definite and permanent gold value. Under the influence of these views, the commercial treaty of September 5, 1902, negotiated between the plenipotentiaries of China and Sir James Mackay on behalf of Great Britain, contained this article[1]:

"ARTICLE II. China agrees to take the necessary steps to provide for a uniform national coinage which shall be legal tender for all duties, taxes, and other obligations throughout the Empire by British as well as Chinese subjects."

In pursuance of these events, the Chinese Imperial Government joined with Mexico, early in 1903, in asking the co-operation of the United States in securing "relative stability of exchange between the gold and silver countries." The result was the appointment of a Commission on International Exchange by the Governments of the United States and of Mexico for the purpose of conferring with representatives of important European powers.[2] China was represented at these conferences by her diplomatic repre-

[1] The text of this treaty, with annexes, is given in *Commission on International Exchange, 1903*, 200–214. A similar clause was embodied in the treaty of China with the United States of October 8, 1903, and with Japan.—*Commission on International Exchange, 1903*, 215–25.

[2] *Vide* instructions of Secretary Hay to the American Commission, *Commission on International Exchange, 1903*, 46. For the relations of Mexico to this subject, see *infra*, 487–89.

sentatives at the capitals where they were held. The American Commission proposed the outlines of a plan for China, by which she should provide for the prompt coinage of a distinctive Chinese silver coin to be maintained at par with a standard gold coin at a ratio of about 32 to 1. The maintenance of par was to be sought by the creation of an exchange fund in foreign financial centres, obtained by a special loan, if necessary, and by the profits on silver coinage. Drafts were to be sold in China on this fund and in other countries on funds in China at fixed rates, somewhat above the usual banking rates.[1]

Upon the subject of introducing a uniform gold-standard system into China, it was declared by the American Commission: "There was unanimous agreement that such a system would be desirable and advantageous, both to China and to the gold-standard countries which have large commercial dealings with her." Upon the question whether the gold standard should be established from the beginning, however, or should come after a uniform national currency had first been established upon a silver basis, there was some difference of opinion. The German Commission came nearest to complete accord with the American plan, in the declaration that the Chinese Government should "take at the beginning of the reform all those steps which would allow her an influence on the rate of foreign exchange." The British resolutions, which represented also to a considerable degree the attitude of the Russian Commission, were as follows[2]:

"That a national currency for the Chinese Empire, consisting of silver coins which shall be full legal tender through the Empire, is urgently desirable.

"As soon as practicable, steps should be taken for the establishment in China of a fixed relation between the silver unit and gold."

A qualified moral support having thus been obtained from

[1] *Commission on International Exchange, 1903*, 51–53.

[2] For text of all these resolutions and reports, see *Commission on International Exchange, 1903*, 141–72.

leading powers for the introduction of the monetary reform into China, Professor Jenks was sent to that country as a special representative of the American Commission and spent there the greater part of the year 1904 in conference with Chinese officials and native and foreign bankers and business men. His report showed a keen interest and warm sympathy in his mission, but revealed the practical difficulties which have thus far prevented definite action by the Chinese Government. These difficulties were political as much as economic, arising chiefly from the lack of power in the central government to supersede the provincial coinage and currency systems established to the profit of the viceroys, and from the disinclination to employ foreign experts to manage the new system as derogatory to the national dignity of China.[1]

Notwithstanding these difficulties, the Chinese Imperial Government took several steps within the next few years to bring order into the monetary and banking system. In November, 1905, an Imperial decree provided for a uniform national coinage of silver, with the Kuping tael as the unit. It was proposed to deposit these coins with the Imperial Bank, which was to issue notes against them, which were to be received by the provincial treasuries and the railway, telegraph, and shipping offices.[2] By degrees the use of *sycee*, the old "shoe currency," was to be abandoned and the old silver was to be received at the mints for recoinage. Action under this decree was, however, soon suspended and the matter was reserved for further consideration.[3]

The creation of the Imperial Bank, at about the same time as the proposed reform in the coinage, was more effective. The first efforts, made in 1904, were not successful in attracting private capital. The government, however, paid in a small amount of capital, and the bank opened

[1] *Cf.* Jenks, *Commission on International Exchange, 1904*, 60–72. See also the powerful report of the Chinese Minister to Russia, *ibid.*, 190–200.

[2] *Annual Report of the Director of the Mint, 1906*, 197.

[3] *Ibid., 1907*, 214.

branches in Peking, Tientsin, Hankow, and Shanghai. Merchants shortly afterwards raised 1,000,000 taels, other branches were opened at important points, and deposits began to be received.[1] A further increase of capital was proposed in 1908, by which the total should be 10,000,000 Haikwan taels ($6,800,000), of which the government was to contribute half. The duration of the bank is for thirty years and it is substantially a state institution. All of its operations are under the control of the Board of Finance, it is entrusted with the public funds, and will make the arrangements for national loans. New regulations regarding the issue of notes have been promulgated and it is intended ultimately to confer upon the bank exclusive privileges in this regard. A new institution has also been established to deal with the funds of the Board of Posts and Communications.[2]

The limitation of the field of the foreign banks substantially to exchange business was departed from only in the case of the Russo-Chinese Bank, which was granted a charter by the Russian Government in December, 1895, with the avowed object of "transacting commercial operations in the East Asiatic countries." For this purpose the bank was given unlimited duration and was aided by both the Russian and Chinese Governments by contributions towards its capital. The open purpose of the Russian Government to avail itself of the influence of the bank to promote closer political association with China was shown by the authority given by the charter to engage in the collection of duties in the Empire of China and in transactions relating to the State Treasury; the coinage, with the authorization of the Chinese Government, of the country's money; payment of the interest on loans concluded by the Chinese Government; the acquisition of concessions for the construction of railways within the boundaries of China; and the establishment of telegraph lines.[3]

[1] *Annual Report of the Director of the Mint, 1907*, 218.
[2] *U. S. Consular Reports*, June 30, 1908, 8-9.
[3] *Charter of the Russo-Chinese Bank, 1904*, 11.

The capital of the bank was originally fixed at 6,000,000 rubles ($3,090,000), but it was raised by successive stages until it stood on January 1, 1908, at 24,088,200 rubles ($12,405,000), without including reserve funds of 9,176,514 rubles. The portion of the capital subscribed by the Chinese Government was 5,000,000 Kuping taels, which worked out at 6,658,200 rubles. The functions of the bank included "the issue of bank notes in taels, dollars, pounds sterling, and in other currency of the country, for an amount not to exceed the paid-up capital and the reserves of the bank." A cash reserve of one-third the amount of notes outstanding was the principal restriction upon the circulation. The actual circulation at the close of 1907 was far within the legal limits, being only 897,476 rubles ($462,000). The bank aided in putting Russian currency in circulation in Manchuria by accepting it at reasonable rates of exchange when disbursed by Russian officers for supplies.[1] The war of 1904 compelled the abandonment of the Japanese branches, but after the war some of them were re-established. The total resources of the Russo-Chinese Bank on December 31, 1907, were 288,176,151 rubles ($148,400,000), of which cash and bullion constituted 15,222,327 rubles; bills, 73,513,291 rubles; loans, 40,784,849 rubles; obligations from correspondents, 60,856,061 rubles, and from other branches, 81,427,685 rubles.[2]

The Yokohama Specie Bank of Japan, while not authorized to issue notes at home, was granted authority by an ordinance of September, 1906, to issue them in Kwantung province and in China.[3] Notes based upon Japanese silver were issued in Manchuria after the Japanese invasion by the Yokohama Specie Bank and were still outstanding late in 1907 to the amount of 1,189,624 yen ($590,000).[4]

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[1] Dubois, 102.

[2] *Directors' Report of June 17, 1908*, furnished through the courtesy of Mr. Walter Kutzleb, New York representative of the bank.

[3] *Economic Annual of Japan, 1908*, 142. These notes were based on Mexican dollars.

[4] *Annual Report of the Director of the Mint, 1907*, 218.

Banking in Siam.

The bank-note circulation of Siam is provided largely by branches of the foreign banks doing business in the Orient —the Hong-kong and Shanghai, the Chartered Bank, and the Bank of Indo-China. In 1907, however, a native bank was established under royal charter under the name of the Commercial Bank of Siam, Limited.[1] The government in 1902 began to issue currency notes, which reduced the circulation of bank-notes. The amount in currency notes outstanding is fully covered by deposits of silver, except that one quarter of the amount may be invested in securities, from which the interest is covered into the Treasury. The avowed purpose of the notes was to obviate transfers of coin, and offices were established throughout the country at which notes might be obtained for silver or deposited in exchange for silver. The notes were made legal tender to and by the government and between individuals.[2] The amount outstanding on March 31, 1907, was 15,209,170 ticals.

The tical was the old monetary unit of Siam, weighing 236 grains, nine-tenths fine, or about three-fifths of a Mexican dollar. The government undertook to establish a gold standard in 1902. The mints were closed, by a decree of November 26th, to the free coinage of silver and an arbitrary parity was fixed of twenty ticals to the pound sterling. It was first proposed to fix it at seventeen ticals, but this was so wide a departure from the existing rate of exchange that it led to vigorous protests and a modification of the rate to twenty ticals to the pound. The banks were also authorized to import a sufficient amount in Mexican dollars to pay off the deposits of the government, which were settled on the basis of five ticals to three dollars.[3]

If it was the purpose of the government to raise rapidly the value of the tical, they were greatly aided by events. The rate of twenty ticals to the pound gave way before the

[1] *Statesman's Year Book for 1908*, 1500.

[2] *Le Marché Financier en 1902–03*, 968.

[3] Alglave, in *Questions Monétaires Contemporaines*, 660.

rise of silver and the tical rose so rapidly as to become a subject of violent speculation. It was apparently the object of the government to produce a scarcity of silver in circulation by forcing the use as far as possible of the new currency notes. The public deposits were also withdrawn rapidly from the three foreign banks.[1] In 1906 an effort was made to establish a stable rate of exchange by serving notice on the banks that the Treasury would, when it deemed it necessary, sell drafts on London at the rate of $14\frac{3}{4}$ pence (29 cents), which made the rate of the tical about sixteen to the pound sterling. The average rate during 1903 was 19.84 ticals to the pound; 1904, 18.28 ticals; and 1905, 17.94 ticals.[2] The closing of the mints and growing demand for money enabled the government to change the rate again in 1907 to 13.33 ticals, giving a gold value to the tical of 18 pence.[3]

Banking in Indo-China.

The modern banking needs of the French possessions in the East, including Indo-China with its eighteen millions of people, are ministered to by the Bank of Indo-China (*Banque de l'Indo-Chine*), with headquarters at Paris. The bank opened its first branch at Saigon on April 10, 1875, under the colonial banking law of 1851.[4] The capital, fixed at that time at 8,000,000 francs ($1,544,000) was increased by successive stages, until it stood in 1908 at 36,000,000 francs ($6,948,000), of which, however, three-quarters remained subject to call.[5] The bank is authorized to do the business of a bank of issue, loans, and discounts for Cochin-China, French India, and New Caledonia, as well as for the protectorate of Cambodia, Annam, and Tonkin. There are branches in China and Japan, at Pondicherry in India, and

[1] Alglave, 662.

[2] *Économiste Européen*, August 31, 1906, XXX., 261.

[3] *Statesman's Year Book for 1908*, 1500.

[4] Denizet, 195.

[5] Reserve funds had accumulated by the close of 1907 to the amount of 25,494,071 francs, or nearly the amount of the uncalled capital—*Économiste Européen*, May 29, 1908, XXXIII., 685.

in various other parts of Asia and Oceanica. The note issues are not permitted to exceed three times the metallic reserve, and the liabilities on account of notes, deposit accounts, and other debts are not permitted to exceed three times the capital and reserve, unless the excess is fully covered by coin. The bank is obliged to deal in several different forms of money to meet the tastes of its various customers. Mexican dollars have been coined at the Paris mint, rupees are used at Pondicherry, and francs are used in keeping the accounts of the bank and in parts of its territory.[1] The life of the bank, originally fixed at twenty years, was last extended in 1900 until January 21, 1920.[2]

The prosperity of the bank depends to a large degree upon the export products of the French dependencies, which consist chiefly of rice. When the exportation of rice from Cochin-China fell from 512,000 tons in 1888 to 287,000 tons in 1889, discounts and advances declined by 10,000,000 francs and the bank suffered considerable losses from the failure of Chinese houses with which it had large transactions.[3] The bank has, however, survived these experiences and steadily extended its influence and resources. A branch was established at Hong-kong in 1894; at Bangkok, the capital of Siam, in 1897; and at Shanghai in 1898. In Annam and Tonkin the bank has forced down the interest rates to agriculturists, from twelve to fifteen per cent. formerly charged by Chinese bankers, to about eight per cent., being guaranteed against loss under certain conditions by the government.[4] The total assets of the bank at the close of 1907 were 228,203,083 francs, of which discounts made up 56,288,010 francs; current accounts and advances, 59,425,536 francs; and cash in Paris and at the branches, 35,306,590 francs. The outstanding circulation was 52,749,436 francs. The other two largest items of liability, aside from capital, were the account of the Treasury of Indo-China, 49,290,099 francs, and obligations to correspondents, 41,425,563 francs.[5]

[1] Lévy, 231. [2] Détieux, 80. [3] Denizet, 200.
[4] Goumain-Cornille, 169.
[5] *Économiste Européen*, May 29, 1908, XXXIII., 684.

The circulation has increased rapidly in recent years. The amount on December 31, 1907, was the minimum of the year, the average having risen from 42,259,000 francs in 1906 to 63,269,000 francs in 1907. Dividends were impaired somewhat by the bad crops beginning in 1888, but were advanced to 25 francs (on 125 francs per share paid in) for 1897, to 30 francs for 1902, and finally to 45 francs for 1905, and 47.50 francs for 1907. The average dividend has been about 23 francs, and the amount thus disbursed for 1907 was 4,234,625 francs.[1]

Like other Oriental banks, the principal function of the Bank of Indo–China was that of an exchange bank, and permanent investments of European capital were hampered by the fall in the gold value of silver. Copper and zinc formed the primitive money of Annam, the principal province of Indo–China, and it was not until the French occupation that even the Mexican dollar became common. A decree of Vice-Admiral Bonard, April 10, 1862, making clean dollars and chopped dollars alike legal tender, had the effect of invoking Gresham's law and driving out all but the chopped dollars.[2] An attempt to introduce the French monetary system, made in 1864, entirely failed, although a few of the subsidiary coins remained in circulation. A second attempt, in 1878, to introduce 5-franc pieces, succeeded so far as the acceptance of the coins was concerned, but they were accepted as the equivalent of gold exchange on France and did not remain in local circulation.[3] After this experiment the piaster was accepted as the unit of Oriental coinage and subsidiary coins were struck to fill the void caused by the insufficiency of Mexican pieces. Not until 1885 were piasters

[1] *Cf.* Goumain-Cornille, 134, and *Économiste Européen*, May 29, 1908, XXXIII., 684.

[2] Arnauné, 335.

[3] Mexican piasters at this time were worth 4.75 francs in gold. The French 5-franc pieces were lighter, but for about three per cent. could be shipped to France, which made their exchange value 4.85 francs. Détieux declares that the first issues of 5-franc pieces were insufficient to meet the demand for exchange on France.—*La Question Monétaire en Indo–Chine*, 57.

coined, and again they disappeared from circulation under the pressure of Gresham's law, because they were heavier than the British dollar and the Japanese yen. Finally, in 1895, a new piaster was authorized of substantially the same weight and fineness as its competitors in the trade of the East. Of this type 66,336,692 were coined before the problem was taken up of establishing a gold-exchange standard.[1]

The first plan for bringing about stability of exchange, proposed by the eminent colonial governor, M. Doumer, in 1897, was decided by a special commission to lack the necessary elements of success.[2] The fall of silver in 1902, and the closing of the mints of Siam in the autumn of that year to the free coinage of the metal, emphasized anew the necessity for action. The government of Indo-China announced a plan for a conference of representatives of Hong-kong, Singapore, China, and Indo-China, in connection with the exposition at Hanoi. Conditions were so serious, however, that they attracted the attention of the government at home, and led to the appointment of a special commission from different ministries interested in colonial or financial affairs. On this commission, named on December 3, 1902, sat M. Pallain, Governor of the Bank of France; André Bénac, of the Ministry of Finance; the eminent economists, Charles Laurent and Maurice Bloch; M. Simon, head of the Bank of Indo-China, and many departmental officials. Only five formal sittings of the commission were held, and its work was concluded on March 28, 1903. The various plans which had been proposed were discussed, but palliatives were recommended rather than a definite constructive policy.

M. Arnauné, Director of the French Mint, prepared the report, and he opposed the immediate adoption of a fixed par of exchange upon the ground that it could not be main-

[1] Arnauné, 344.

[2] M. Doumer proposed simply to suspend free coinage of silver, fix the piaster at 2.50 francs, and rely upon scarcity to maintain parity. The facts are fully set forth in the able and convincing work of M. Détieux, *La Question Monétaire en Indo-Chine*, 190-97.

tained in the face of an adverse balance of trade.[1] The measures adopted were the suppression of the export tax on silver coins, the gradual retirement and recoinage of Mexican piasters, including limitation of their legal-tender quality, and the issue of a sufficient quantity of French piasters to meet the needs of commerce. The importation of Mexican coins was prohibited and a convention was made with the Bank of Indo–China for the gradual exportation of the stock in the country. Their exodus was encouraged by the demand for money in Manchuria in 1905, due to the war between Russia and Japan, and the flight of the French pieces also was stayed only by a decree of January 30, 1905, imposing an export tax.[2]

The incompleteness of the measures taken in 1903 was the subject of severe criticism by French exporting interests and leading economists. The French chambers of commerce almost unanimously urged the definite adoption of the exchange standard.[3] The Governor of Indo–China appointed a local commission October 8, 1905, which recommended a value for the piaster of 2.75 francs ($0.531) and the adoption of the Philippine system for maintaining the parity of the silver coins. The home government was not ready to approve this step, and the rise of silver carried the value of the bullion contents of the piaster for a brief period in 1906 as high as 2.94 francs, or nearly seven per cent. above the proposed parity. The local currency remained subject to the fluctuations of the market for silver bullion, except that the government intervened from time to time in fixing a rate

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[1] A synopsis of the views of M. Arnauné is given by Détieux, 320–28, and these views are analyzed by him, *La Question Monétaire en Indo-Chine*, 382–84, substantially in accord with the policy of the present writer.

[2] Détieux, 333.

[3] *Vide* list in Détieux, 311, and report of the Paris Chamber, May 13, 1903, by M. Laguionie, *Commission on International Exchange, 1903*, 379–91. The latter report declared flatly for "a gold fund destined to pave the way for the ultimate adoption of the gold standard."

for official purposes which followed in a halting manner the market rate, without conforming to it.[1]

[1] Thus, from June 15, 1908, the rate was 2.45 francs, which was changed on June 22, 1908, to 2.50 francs.—*Économiste Européen*, June 26, 1908, XXXIII., 804.

CHAPTER XXII.

THE EARLY CRISES OF THE LAST CENTURY.

The Periodicity of Crises up to 1793—The Use of Accommodation Bills in the Crisis of 1782—The Effects of the Napoleonic Wars and the Crisis of 1810—The Speculative Mania of 1825—The Specie Circular and the Bank War in the United States—The Railway Development and the Crisis of 1847.

THE development of existing methods of commerce and of credit belongs essentially to the period of the last century and a half. Great commercial transactions were carried on before that time, but they were carried on by other banking methods than those of the modern age. The world was not linked, as it is to-day, in all its parts, by a community of commercial operations and by houses of international banking credit. Such economic crises as occurred were local in their effects and were produced, much more directly and more often than those of to-day, by political events. Their chief interest, therefore, is in demonstrating the essentially periodic character of such convulsions wherever commerce has attained anything like its modern development. Professor Jevons finds some evidence of a stock-jobbing mania as far back as 1682 and others in 1711, 1721, 1731, 1763, 1772–73, and 1783, with evidence of periods of high prices in 1742 and 1752. Complaints of stock jobbing and "bubbling" were so pronounced that acts were passed by Parliament in 1710 and 1711, and again in 1733, with the result, according to Defoe, that "a happy stop was put to this spreading mischief."[1]

[1] Jevons, *Investigations in Currency and Finance*, 210–211.

The first serious credit crisis of which authentic details exist was that of 1763, when the inflated bubble blown by the Seven Years' War was pricked by the coming of peace. This crisis is of peculiar interest, because it was most severe at Amsterdam and Hamburg, where no paper currency was employed except the "bank money" issued against deposits of coin by the Bank of Amsterdam and the Bank of Hamburg. The next great crisis,—that of 1772,—fell upon England and Scotland in the midst of a period of remarkable industrial and inventive activity. The first act for the building of a canal in England was passed in 1755, and the next twenty-five years witnessed the construction of a network of canals more extensive than those of any other country except Holland. Brindley completed the canal from Worsley to Manchester in 1762 and Arkwright and Watt were at the same time developing their wonderful mechanical inventions.

The practice of drawing accommodation bills seems to have come into use in Scotland for the first time just before this crisis, although there is evidence that it had been practised earlier in England. A newspaper of the time contained a letter stating that "Banking companies had appeared in almost every corner of the Kingdom, and bills of exchange had been multiplied by a new method called Swivelling, without any solid transactions."[1] Adam Smith alludes to "the well-known shift of drawing and redrawing," and says that "The practice of raising money in this manner had been long known in England, and during the course of the late war, when the high profits of trade afforded a great temptation to overtrading, is said to have been carried on to a very great extent."[2] Professor MacLeod declares the system of accommodation bills to be "the curse and bane of commerce," and expresses the opinion that "it has been the great cause of those frightful commercial crises which seem periodically to recur." The English courts have decided, however, that a bill given for a consideration is a good bill

[1] *Public Advertiser*, July 8, 1772, quoted by MacLeod, II., 215.
[2] *Wealth of Nations*, Book II., Ch. ii.

and that such consideration exists when such bills are mutually interchanged. This makes it difficult to legislate against accommodation bills, even if it were desirable, without destroying banking transactions, which are based upon a similar interchange of credits.[1]

The crisis of 1783 is notable for having had an international character, in affecting the *Caisse d'Escompte* in Paris as well as the British banks, and for the enlightened policy of sustaining credit adopted by the Bank of England. A policy of rigid contraction was at first followed by the directors, but as soon as this policy had turned the flow of bullion towards England they came boldly to the assistance of the government and expanded their discounts to solvent houses. A different policy was pursued in the crisis of 1793 and it was the government, instead of the bank, which came to the relief of credit. Everything was ripe in England in 1792 for the explosion of a crisis when the disturbances in France and the declaration of war by the National Convention applied the torch.[2] A large failure occurred in London on February 15, 1793, and the panic spread throughout England, causing the failure of over one hundred of the country banks and frightening the Bank of England into the reduction of its discounts.[3] The pressure for money suggested to Sir John Sinclair a return to Montague's device in 1697 of issuing Exchequer bills to solvent merchants. A committee was appointed by the House of Commons, which promptly re-

[1] MacLeod, *Theory and Practice of Banking*, I., 359–68.

[2] M. Juglar lays stress upon the fact that this crisis was a typical commercial crisis, due to economic conditions, and was not essentially hastened by the declaration of war, for unfavorable exchanges and exports of specie had already set in twelve months before hostilities. France suffered a severe crop failure in 1789, but this did not arrest the expansion of credit and of commercial operations until the period of ten years from the preceding crisis of 1783.—*Des Crises Commerciales*, 302.

[3] Country merchants and bankers were permitted under then existing laws to issue optional notes, payable in the country or in London, and it is stated that out of 279 country bankers issuing notes 204 issued these optional notes.—Levi, 69.

ported in favor of the issue of £5,000,000 in such bills under the direction of a board of commissioners. The bill was passed after some opposition and afforded almost instant relief. Applications for £2,202,000, made by 238 persons or firms, were granted and only forty-nine applications were definitely rejected. Only two of the parties assisted became bankrupt, much of the money was repaid before it was due, and the government obtained a clear profit, above all incidental expenses, of £4348.

The period from the crisis of 1793 to the close of the Napoleonic wars in 1815 was marked by several spasms of panic in the markets of Great Britain and the Continent, but these convulsions were so directly due to political events that they lose much of the regular character of commercial phenomena. The period of expanding credit was interrupted in England by the suspension of specie payments in 1797, and was again cut short in 1803, after the upward movement had been resumed, by the rupture of the Peace of Amiens. France witnessed a collapse of credit soon after the rupture of the Peace, which brought Napoleon back from Austerlitz to reorganize the Bank of France.[1] The speculative opportunities of the long war left their impress upon the trade of Europe and the United States for many years, and the incidents of the trade drove the United States into war with Great Britain.

The Crisis of 1810.

The publication of the Berlin decree of Napoleon on November 21, 1806, shutting British commerce out of Europe, was one of a series of events which led to the wildest speculation in raw materials and steadily advanced their prices. The products of the countries of the East rose to double or treble their usual figures, and the French occupation of Spain quadrupled the price of Spanish wool. France was supreme in Italy, which affected the value of silk, and she attempted to dictate a policy of exclusion against Great Britain to Russia and Sweden. These efforts of the French

[1] *Vide* p. 46.

Emperor were far from effective in stifling commerce, but they gave it the character of a speculation and enhanced its profits when it was successful. The imports of the United Kingdom increased from £28,561,270 in 1805 to £39,301,-612 in 1810 and the exports increased in the same period from £31,064,492 to £43,568,757. England lost trade in the United States by her retaliatory decrees against Napoleon, which drove American products to France, but British goods penetrated through Napoleon's paper blockade at Embden and Hamburg, and the corrupt French officials grew rich as the price of certifying that these goods were the product of Prussian factories.[1] The country banks of England increased under the stimulus of speculation from 270 in 1797 to 600 in 1808, and 721 in 1810. The Bank of England, in the meantime, increased its discounts from £9,100,-000 in 1804 to £16,400,000 in 1809, and £21,400,000 in 1810. The circulation of the Bank of England rose from £16,400,-000 in 1801 to £24,200,000 in 1810, but the increase was trifling up to 1809 and was the consequence rather than the cause of the great increase in prices due to speculation.

If over-issues of bank-notes were responsible in some degree for the speculative mania in England, rather than merely its convenient tools, it was because the divorce of the paper currency from specie made bank-note issues easy and their issuers irresponsible. The proof that the speculative mania was not due entirely to the issues of paper money in Great Britain may be found in the fact that a like condition existed in France, which was upon a specie basis. The liquidation which followed the crisis of 1805 caused coin to pile up in the Bank of France to such an extent that the bank was obliged to invest a part in the obligations of the receivers general and to reduce interest to two and three per cent.[2] Commerce began to expand again in 1808, and the discounts of the Bank of France reached in that year 142,-000,000 francs and in 1810 187,000,000 francs. Numerous failures occurred in 1810, but the leading merchants of Paris

[1] Cunningham, II., 521, note.

[2] Juglar, 406.

kept their heads, discouraged exaggerated speculations, and prevented a serious panic. In England, business came to a standstill, the discounts of the bank dropped from £23,000,000 to £12,000,000 and on April 11, 1811, the Treasury came to the rescue of the market by an advance of £6,000,000 in Exchequer bonds to merchants offering good security. The period of liquidation was made more severe than usual and recovery slower by the great poverty of the crops of 1811. Speculation in agricultural products and land led to the rapid extension of the system of enclosure of land which had formerly been in commons. Such large sums were sunk in fencing and improvements and so much land was brought under cultivation that the fall of prices, upon the close of the Napoleonic wars and the resumption of specie payments, ruined many small cultivators and threw their land again upon the market.[1]

The Crises of 1814–19.

The commercial movements of the second decade of the present century reflected the disturbed condition of public affairs. The policy of crushing each other's trade by paper blockades and interference with the rights of neutrals, which governed England and her allies on one side and France and her dependencies on the other, made commerce like the casting of dice in a game of chance. Markets which had been closed to English and American goods were opened from time to time, with the expulsion of the French from Portugal and Spain and the accession of Russia and Sweden to the coalition against Napoleon. The news of his disasters in Russia in the autumn of 1812 diffused the belief in England that the French Emperor was upon the eve of his downfall and that France would soon be thrown open to the commerce of the world. Speculation ran riot in colonial produce, which it was believed would find a ready market in France at the extravagant prices which ruled there for the small quantities which had escaped the Continental

[1] Cunningham, II., 479.

blockade.[1] The rejection of the recommendations of the Bullion Report and the depreciation of irredeemable bank-notes in England encouraged the delusion that the growth of wealth was commensurate with the rise of prices. Prices reached their maximum at the moment of the abdication of Napoleon in the spring of 1814 and the coming of the general peace. The opening of the Continental markets had been too greatly discounted, goods could not be sold at the prices at which they were held, and the fabric of paper wealth tumbled like a house of cards. The country banks failed by the score in 1815, 1816, and 1817, and the disappearance of their notes so contracted the paper circulation that Bank of England paper seemed for a moment on the point of touching par.[2]

The United States were already feeling the embarrassments of a new country in maintaining an adequate metallic circulation, when the War of 1812 and the financial incompetence of the government precipitated a crisis. The expiration of the charter of the Bank of the United States in 1811 brought many new banks into the field and a veritable banking mania prevailed for several years in the Middle, Southern, and Western States. The offer of the Pennsylvania shareholders of the Bank of the United States to pay a bonus of $500,000 to the State for the privileges of a State charter, and to loan the State $500,000 in addition,[3] aroused such extravagant estimates of the profits of banking that the proposition was rejected and an effort made to secure these profits for local banks. A bill authorizing forty-one new banks was passed over the veto of the governor and thirty-seven of them went into operation in 1814. Similar events occurred in other States, and in two years the number of banks in the United States increased from 88 to 208. The volume of specie was not adequate to support the mass of credit thus attempted to be created and what there was in the country rapidly

[1] Coffee, which was four pence per pound in England, had been selling for four or five shillings in France.—Juglar, 323.

[2] *Vide* p. 111.

[3] McMaster, IV., 287.

drifted to New England, where prices were low and transactions were upon a metallic basis.[1]

It needed but a breath to overthrow credit in the South and West, and the motive came with the capture of Washington on August 24, 1814. The banks of Philadelphia announced their suspension on August 31st, and the banks of New York followed on the next day, and did not resume until after the creation of the second Bank of the United States in 1817. The country was stripped of specie, notes were issued for as small an amount as one cent, and many municipalities put out notes for a few cents, redeemable in bank-notes and receivable for taxes.[2] The period following the war was one of prostration in the United States as well as in Great Britain. The United States were for a short time importers and found the British exporters eager to sell because of the excessive stocks they had accumulated in anticipation of the European peace. But importations fell off as the American people discovered the real poverty with which they had come out of the war. The month of August, 1819, found 20,000 persons seeking employment in Philadelphia, and a similar condition of affairs in the other great cities of the North.[3]

The economic disturbances in England were chiefly monetary in 1817 and 1818, but were intensified by scarcity and the high prices of cereals. The monetary difficulties were due to the steady withdrawal of gold for foreign coinages and in the form of subscriptions to Prussian, Austrian, and French loans. The sum of 125,000,000 francs in gold was coined at the Paris mint, of which three-fourths was estimated to have been drawn from England.[4] France, in the meantime, was paying the penalty of defeat in the field. Commercial affairs were brought nearly to a standstill by the entrance of the Allied armies into Paris in 1814, and they suffered another period of enforced liquidation after

[1] *Vide* p. 363.

[2] McMaster, IV., 297.

[3] Sumner, *History of American Currency*, 79.

[4] Juglar, 327.

Napoleon's return from Elba in March, 1815. France was obliged, after Waterloo, to issue 500,000,000 francs of public obligations to pay the war contributions imposed upon her. The price of securities fell so disastrously that the Minister of Finance came to the rescue of the market and loaned freely to the speculators, in order to maintain prices. The result was to bring the securities raining upon the Paris market and to increase the exportation of bullion.[1] The metallic reserve of the Bank of France fell from 117,000,000 francs on July 1, 1818, to 37,000,000 francs on October 29th. The bank shortened the term of commercial discounts to forty-five days and in 1819 was flooded again with idle capital.

The Crisis of 1825.

The next great crisis which shook the commercial world attained its height in England at the end of the year 1825. The metallic reserve of the Bank of England steadily increased from 1820 until 1823, when it stood at £14,100,000, while the circulation was reduced until it stood at about £16,300,000. The Bank was required by the Act of 1819 to retire its £5 notes by redeeming them in gold within four years. This demand for gold, comparatively trifling in itself, was accompanied by a foreign drain due to the immense loans contracted by the governments of Europe and Latin America and the fever of speculation in domestic and American companies which developed in England. This speculative mania was attributed by Mr. J. H. Palmer, the Governor of the Bank of England, to the reduction of the interest on government securities. He said to the Parliamentary committee of inquiry into the causes of the crisis :

> The first movement in that respect was, I think, upon £135,000,000 of five per cents., which took place in 1823. In the subsequent year, 1824, followed the reduction of £80,000,000 of four per cents. I have always considered that reduction of interests, one-fifth in one case, and one-eighth in the other, to have created the feverish feeling

[1] Raffalovich, *Marché Financier en 1891*, 9.

in the minds of the public at large, which prompted almost everybody to entertain any proposition for investment, however absurd, which was tendered. The excitement of that period was further promoted by the acknowledgment of the South American republics by this country, and the inducements held out for engaging in mining operations, and loans to those governments, in which all classes of the community in England seem to have partaken almost simultaneously. With those speculations arose general speculation in commercial produce, which had an effect of disturbing the relative values between this and other countries, and creating an unfavorable foreign exchange, which continued from October, 1824, to November, 1825, causing a very considerable export of bullion from the bank, about seven millions and a half. [1]

The correctness of these views is supported by the phrensy of speculation which seized the community. The new republics of Latin America, the New European states which had been carved out of the Empire of Napoleon, and the older governments which had incurred heavy war expenses, appeared in the London market as borrowers and the public loans issued within four years were estimated at nearly £50,000,000. Stock companies were formed with objects as indefinite and impracticable as in the time of the South Sea Bubble. One which found subscribers proposed to drain the Red Sea to recover the gold lost by the Egyptians when pursuing the Israelites.[2] It was estimated that £150,000,000 of British money, including that invested in government loans, had been sunk in Mexico and South America alone.[3] Much of it went into mining shares, which advanced fabulously during 1824 and 1825. The Real del Monte shares, on which £70 was paid, were at £550 in December, 1824, and £1350 in the following January. The first payments required did not usually exceed five per cent. of the par value of the shares, so that the humblest were able to count upon enormous dividends from very trifling investments. The number of stock companies created was computed at 624, calling for a nominal capital of £372,173,100. This enormous

[1] Gilbart, I., 65.

[2] Juglar, 334.

[3] MacLeod, *Theory and Practice of Banking*, II., 111

sum, if actually paid in, would have required $1,850,000,000 of capital, and in the England of that day, with her population of 13,000,000, would have represented an investment of nearly $150 per capita, or one-third of the wealth of the country.

The withdrawal of so much capital from legitimate commercial uses as was actually paid into these companies caused a sharp increase in the value of money and the prices of commodities, and manufacturers were forced to borrow money to carry on their ordinary operations at the increased rates. The rising prices in the latter half of the year 1825 reduced purchases, the warehouses began to fill and the owners of merchandise were confronted with the usual dilemma of a commercial crisis,—to sell their goods at a loss or make new loans at higher rates of discount. The coin reserve of the Bank of England steadily declined after March, 1824, when it stood at £13,800,000, until it reached £9,490,420 on January 29, 1825, and £6,659,780 at the end of April. The reserve had been forced down to £3,012,150 on November 26th, and the country banks, which had been increasing their discounts and their note issues, were suddenly brought to a halt by the failure of Sir Peter Pole and Co., on Monday, December 12, 1825. Sixty-three country banks were forced to suspend, and "the consequence," says Mr. Bagehot, "was a panic so tremendous that its results are well remembered after nearly fifty years."

The Bank of England went on expanding its discounts up to the end of April, in spite of an adverse foreign exchange and the rapid reduction of the coin reserve. The process of contraction began in May, but the bank did not raise the discount rate until the panic had actually broken. It was not until December 13th, that they advanced the rate from four per cent. to five. The policy of contraction during the first days of the panic, on Monday and Tuesday, caused absolute paralysis of business. Mr. Huskisson said afterwards in the House of Commons that during these two days, "It was impossible to convert into money, to any extent, the best securities of the government." The usury laws, which

limited the rate of interest outside the Bank of England to five per cent., prevented loans of private capital, which might have been willingly made at seven, eight, or ten per cent. The very desperateness of the situation brought its own remedy in time by forcing the sale of commodities at a ruinous loss, which brought foreign capital pouring back into England in the purchase of goods. The directors of the bank changed their course on Wednesday, enlarged their issues to solvent borrowers, and almost in a moment the panic was stayed in London.

The bank issued upwards of £5,000,000 in notes, between Wednesday and Saturday, by advances on stock and Exchequer bills as well as by discounts,—in the language of Mr. Jeremiah Harman, one of the directors, "by every possible means consistent with the safety of the bank; and we were not, upon some occasions, over-nice." The coin in the vaults of the Bank of England scarcely exceeded £1,000,000 on Saturday night of this eventful week and the influence of the panic had not been fully stayed throughout the country. The clamor for gold was stilled, however, by the free issue of notes and a box of £1 notes was sent down into the country. The Gurneys, who did business at Norwich, displayed piles of notes many feet thick on their counters and prevented a run by the confidence which this exhibition inspired. The aid of the Bank of France was sought and a credit for £2,000,000 opened on three months bills.[1] The sum of £400,000 arrived from France in gold on Monday, the 19th, but the deputy governor of the Bank of England had already given the assurance to Lord Liverpool on Saturday evening that the danger was over in the city and that quiet would soon be restored in the country.

The crisis of 1825 was an essentially English crisis, because loanable capital was more plentiful in England than elsewhere and the speculative mania was mainly confined to the London market. The solidarity of the world's markets was indicated, however, by the appeal to the Bank of France

[1] Levi, 188.

and by the reflex influence of the crisis in France and the United States. The war with Spain caused some curtailment of commercial operations in France in 1823 and broke the force of the ascending movement of business. Much of the gold expelled from England by unfavorable exchanges found its way into the Bank of France, so that when the reflex movement of the English crisis was felt in France in the demand for enlarged discounts, the bank had an ample reserve to meet it. The volume of discounts, which had been 478,000,000 francs in 1824, increased to 638,000,000 in 1825 and 688,000,000 in 1826, and fell to 556,000,000 in 1827 and 402,000,000 in 1828. The ebb and flow of the commercial tide followed, therefore, substantially the same course in France as across the channel, but without such an acute disturbance.[1] The rate of discount was maintained uniformly at four per cent.

The Crisis of 1837–39.

The crisis of 1837 was felt most severely in the United States, but over-speculation in banks and joint stock companies affected Great Britain and the Continent, and Great Britain was affected also by her large loans in America. There were symptoms of a panic in England in 1832, but they arose from political events, aggravated by bad management of the Bank of England, and did not present the phenomena of a genuine economic crisis. The government undertook the conversion of the public debt at three and a half per cent. and the disturbance thus caused in the money market was complicated with the expiration of the charter of the bank and the political convulsions on the Continent. The reform bill was pending in Parliament and the masses were irritated against Wellington and the conservative ministry for their opposition. The circulation of the Bank of England was much less than in 1825 (about £16,800,000), but the coin reserve had been allowed to fall below £5,000,000. The attempt to create a political run upon the bank

[1] Juglar, 410.

caused alarm for a time, but was repressed without serious results.[1]

The crisis of 1837 in the United States was one of the results of that discounting of the future in a new country, which results in over-speculation and the sinking of capital in unproductive enterprises. Foreign capital became available in great quantities for the use of the American people after the recovery from the crisis of 1825 in England, and specie imports kept company with an excess of imports of merchandise, amounting in seven years to $140,700,000, as evidence of the heavy loans which Europe was willing to make in the United States.[2] The fact that the United States succeeded in wiping out their entire public debt and accumulating a surplus seemed, among the financiers of European countries, burdened under millions of debt and annual interest charges, to be a proof of great prosperity.[3] The success of the Erie Canal led to the projection of many similar enterprises in the Middle States and the West; cities were laid out in the wilderness, and city lots sold at prices which in conservative times could hardly have been realized in New York and Philadelphia. The valuation of the city of Mobile in 1831 was $1,294,810; it rose in 1837 to $27,482,961, only to fall in 1846 to $8,638,250.[4] The price of cotton was pushed up, and negroes became as active a subject of speculation in the South as the timber lands of Maine in the North.

[1] Juglar, 342.

[2] The excessive purchases of foreign goods, which did not have to be paid for in either merchandise or bullion, is shown by the fact that the imports from Europe increased from $62,893,883 for the year ending September 30, 1833, to $127,511,020 in 1836, and even the imports from other countries increased from $38,154,060 to $49,068,134. This great increase in consumption was offset only partially by the increase in exports of American merchandise to Europe, which rose from $56,556,837 in 1833 to $96,413,449 in 1836, while other exports slightly fell off. The reaction was striking after the breaking out of the crisis. Imports fell during the year ending September 30, 1838, to $62,017,575, while exports from the United States to Europe fell only to $79,849,768.

[3] Juglar, 464.

[4] Shepard, 251.

Speculation in the public lands ran to extravagant limits. The United States did not advance the price of public lands beyond one dollar and a quarter per acre, which had been fixed by law many years before. The speculators bought of the government at this fixed price and sold on a steadily rising market. The increase in sales of public lands had been comparatively steady and healthful up to 1834, when the sales were 4,659,218 acres and the amount received was $6,099,981. The next year witnessed the sale of 12,364,478 acres and receipts of $15,999,804, and 1836 witnessed sales of 20,074,870 acres and receipts of $25,167,833. The speculative character of these sales is indicated by the steady decline in receipts after 1837, until they fell in 1842 to only $1,417,972.[1] President Jackson began to realize in 1836 the true character of the rush for the public hands and endeavored to check it by the issue of the famous "Specie circular." The circular was the result of the conclusion that the banks organized in the new sections of the West were not safe enough to meet the requirement of existing law, and that payment for lands should be received only in specie and notes of specie value. These banks were organized in many cases by land speculators, who issued notes, borrowed the notes and bought the land. The notes received for sales of land were deposited in the bank, increasing its resources, and were then borrowed again for new purchases of land. The "Specie circular," issued July 11, 1836, put an end to this by requiring payments in coin or land scrip, except until December 15th by actual settlers or residents of the States in which the lands were situated.

The shriek of rage which was uttered by the defeated speculators was echoed by the political enemies of Jackson, and the legend still has believers, that the crisis of 1837 was the result of no other causes than the specie circular and the deposit of public funds in State banks instead of the Bank of the United States. The events connected with the discontinuance of deposits in the Bank of the United States and

[1] Poor, 528.

the veto of the charter[1] undoubtedly caused some degree of financial uneasiness at the time, but the causes of the crisis of 1837 lay deeper than merely political events. The inflation of credit which has been attributed by some to the distribution of the public monies among the State banks had already begun before the transfers were made, and the inflation would have been trifling if it had been limited to the amount of the deposits at the time. The deposits were then only $10,000,000, and it is obvious that they would not have been a large factor in a healthy money market and were a still smaller factor in a period of inflated values and extravagant speculation. The deposits increased, however, from $10,000,000 in 1823 to $41,500,000 in 1836.

Congress added fuel to the speculation, and greatly embarrassed the Treasury when the crisis came, by the policy of distributing the surplus revenues among the States. Tariff reductions, although recommended by President Jackson, were not made with sufficient rapidity to prevent the accumulation of a surplus, which amounted, on January 1, 1836 to $26,749,803. This surplus and subsequent accumulations up to January 1, 1837, reserving $5,000,000 for the government, were ordered by the Act of June 23, 1836, to be "deposited" with the several States in proportion to their representation in Congress. Jackson had favored a distribution in 1829,[2] but in 1836 had come to see the dangers of the plan and only reluctantly permitted the bill to become a law. A new element of disturbance was projected into the financial situation by the coinage Act of 1834, which changed the ratio of value of gold and silver from fifteen to one to sixteen to one, in order to promote the circulation of gold.[3] It was the desire of President Jackson and Senator Benton to create a metallic currency, in place of a bank-note currency resting upon insecure foundations, and it was provided, in the bill authorizing the deposit of

[1] *Vide* ch. xiii.

[2] Knox, 169.

[3] The measure was designed to make a market for the gold which was then being mined in considerable quantities in the Southern Appalachian range.

the surplus with the States, that each of the deposit banks should redeem its notes in specie and should issue no notes after July 4, 1836, of a lower denomination than $5. The adoption of a coinage system which sent silver to a premium over gold, at the same moment that it was proposed to exclude small notes from circulation, threatened to leave the country without a medium for small payments, but the breaking out of the crisis and the suspension of specie payments suspended the operation of the new conditions before any considerable amount of gold had found its way into circulation.

Omens of trouble were already in the air in the opening months of 1837. Popular meetings were held in New York for the purpose of protesting against the high prices of provisions and the undue inflation of bank credits. One of these meetings, on February 14th, became riotous, a flour warehouse was gutted, and the military were called out to preserve order.[1] The commercial crash was delayed until April. The news from England indicated a financial stringency there which was soon felt in the United States. One hundred and twenty-eight failures occurred in New York between April 1st and April 11th, cotton fell nearly fifty per cent., the banks of New York suspended specie payments on May 10th, and the banks throughout the country which had not already fallen followed the example of New York within a few days. The deposit banks ceased to pay specie, the public revenues fell off, further deposits of public monies with the States were suspended, and on May 15th President Van Buren called an extra session of Congress for September.[2]

[1] Shepard, 270.

[2] The New York banks resumed specie payments on May 10, 1838, and most of the other banks of the country followed on July 1st. Early resumption was strongly championed by ex-Secretary Albert Gallatin, then President of the National Bank of New York, who was chairman of a committee, appointed by the New York banks as early as August 15, 1837, to confer on the subject with the bankers of other cities. The New York banks would probably have resumed much earlier, but for the dilatory policy of the United States Bank of Pennsylvania.—Stevens, 282–85.

An important incident of the crisis was the fall in the price of cotton, which ultimately resulted in a serious loss to the United States Bank, which was now operating under a Pennsylvania charter. Heavy obligations had been incurred by the bank abroad, and in its efforts to protect the New York business community from disaster President Biddle and several associates, in their effort to meet these obligations, made large purchases of raw cotton, against which they sold exchange to the bank and thereby placed the necessary funds at its command at foreign points.[1] These operations were at first profitable both to the bank and to Biddle and his associates, but high prices stimulated the creation of banks all through the cotton belt, which made advances to the planters and undertook to sell cotton on their own account in Europe. The rise of the Bank of England discount rate suddenly curtailed the profits of many of these banks and the Bank of the United States went to their rescue in order to maintain the price of cotton. Bank shares and commercial paper were purchased by Biddle at a discount of more than twenty-five per cent., which were thrown upon the European market and eagerly snatched up at par by European investors, who had not discovered the tottering condition of American finance. But the enterprise was too vast, even for Biddle's resources. The reserves of cotton were brought out, old stocks in the hands of manufacturers were allowed to run down, consumption diminished and mills reduced their output, while bale upon bale continued to pour upon the Liverpool and Havre markets. The House of Hottinguer of Paris protested Biddle's paper, the Hopes of Amsterdam broke off relations with him, and the price of cotton tumbled, in common with that of other commodities.[2]

Speculation in banks and joint stock companies had reached a serious point in England, irrespective of large English investments in America. The growth of the specu-

[1] *Vide* Opinion of the Court of General Sessions, March term, 1842, pp. 11–14.

[2] Juglar, 462–65.

lative spirit did not escape the attention of shrewd judges of the situation, and Lord Wharncliffe as early as August 14, 1834, called attention in Parliament to the extension of joint stock banks and the insufficient capital with which they were trading.[1] The matter was made the subject of a Parliamentary inquiry in May, 1836. Mr. Poulett Thompson, President of the Board of Trade, took part in the debate and said that he had kept a register "of the different joint stock companies, and of the nominal amount of capital proposed to be embarked in them. The nominal capital to be raised by subscription amounts to nearly £200,000,000 and the number of companies to between 300 and 400." "The greater part of these companies," Mr. Thompson observed, "are got up by speculators, for the purpose of selling their shares. They bring up their shares to a premium, and then sell them, leaving the unfortunate purchasers, who are foolish enough to invest their money in them, to shift for themselves." The most extravagant expectations of railway profits and of mining profits absorbed private capital and were preparing the way for a crash, when the failure of the wheat crop in 1836 inaugurated a drain of gold from the Bank of England.

The bullion in the bank in March, 1836, exceeded £8,000,000. From this date it steadily declined, but it was not until July that the bank raised the discount rate to four and a half per cent. and in August to five per cent. The Agricultural and Commercial Bank of Ireland failed in November, and a run began upon the other Irish banks. They had strengthened themselves by drawing gold from the Bank of England to the amount of £2,000,000 and were able to pay specie on demand, but the distrust was so great that Bank of England notes were taken by the Bank of Ireland only in small amounts and at a discount of two shillings and sixpence in the pound. The Northern and Central Bank at Manchester, with a capital of £800,000 and with forty branches, appealed to the Bank of England for help in

[1] MacLeod, *Theory and Practice of Banking*, II., 137.

December, and it was only granted on condition that the institution should discontinue all its branches except at Liverpool, and afterwards that it should discontinue business after February, 1837.[1] The bank was more liberal to some of the large houses with American connections and eventually aided them to the amount of £6,000,000.

The latter half of the year 1837 and the year 1838 showed an increase of the cash reserve of the Bank of England and a reduction in the discounts and circulation. The access of gold to England, however, was due to the abuse of credit in America, France, and Belgium and did not indicate a return of sound conditions at home. Notwithstanding the danger, the Bank of England lowered its discount rate, November 29, 1838, from four to three and a half per cent., and an increase to five per cent. on May 16, 1839, was insufficient to arrest the downward course of the reserve. The suspension of specie payments again stared the bank in the face, offers were made to sell annuities, some public stocks were sold, and drafts were made upon Paris for £600,000 in bills of exchange. The bank was unable to reimburse these drafts when they matured and foreign bankers began to draw upon London for coin. Messrs. Baring and Company came to the rescue and made an agreement with several bankers of Paris to accept bills of exchange to the amount of £2,000,000. A like arrangement with the bankers of Hamburg procured £900,000 more, and on September 2, 1839, when the coin and bullion were at £2,406,000, the decline was arrested.

The Bank of France was fortunately in a position to meet these demands in 1839, for its own coin reserve had increased in January to 214,000,000 francs ($41,400,000). It would have been less easy to spare gold at an earlier date, for the bank had only 105,000,000 francs ($20,000,000) in its reserve in January, 1837, and demands for discounts were rapidly increasing from Paris and the country. The bank was compelled to buy 8,000,000 francs in gold and to import 10,000,-

[1] Gilbart, I., 306.

000 francs in gold bullion.[1] The crisis was less severe in France than in England and the Bank of France was able, at some risk to commerce, to maintain the uniform discount rate of four per cent.[2] The demand for coin and for increased discounts came mostly from the interior of France and while the gold flowed rapidly from the bank into the provinces in 1836, it flowed almost as rapidly back in the second half of 1837. The suspension of the Bank of Belgium in November, 1838, and the disasters in the United States led to an increased demand for accommodation from the Bank of France and discounts rose from 103,000,000 francs in June, 1838, to 228,000,000 francs in January, 1839, but legitimate demands were met without impairing the coin reserve.

The Crisis of 1847.

The crisis of 1847 was so severely felt in Great Britain and France, on account of the failure of their crops, that they were driven to pour their gold and silver into the lap of the United States in the purchase of her bounteous harvests, and the year was for her one of unusual prosperity. The value of the exports of merchandise from the United States for the fiscal year 1847 was $156,741,598, an increase of more than forty per cent. over any preceding year; the excess of exports over imports was $34,317,249, a balance never again attained until 1876; and the imports of gold and silver were $21,574,931,—a total which stood substantially unchallenged until shortly before the resumption of specie payments in 1879. This great prosperity on the western shore of the Atlantic was obtained at the expense of fever, starvation, and death on the eastern shore. A long season of rain and wet rotted the entire potato crop of Ireland in 1845 and 1846 and destroyed the food of a people. The Irish peasant, who had no other means of living, was dying literally by tens of thousands among the marshes and hovels of his native land. Coffins could no longer be pro-

[1] Juglar, 414.

[2] Courtois, 159.

vided in some districts and the coroner refused to go on holding inquests. The population of Ireland was found when the famine was over to have shrunken by death and emigration from eight millions to six millions.[1] Three-quarters of a million of Irish immigrants reached the United States in the decade ending with 1850 and nearly a million followed in the next.

The great demand for gold to pay for foreign grain was the immediate occasion of the crisis of 1847, but there had been also a great transformation of circulating into fixed capital in the building of railways, and the effect of the export of gold was much intensified in England by the operation of the Bank Act of 1844. This act did not accomplish its original purpose, to contract domestic circulation in the exact measure of the export of bullion. Had it done so, the effect would have been even more disastrous than was actually the case; but it accomplished, at a time when it was too late to arrest speculation, a needless pressure upon the money market and a sharp contraction of discounts. The railway mania steadily spread in Great Britain for several years. New railway capital was authorized by Parliament in three years to the amount of £221,000,000 and the amount actually expended on railways in two and a half years was computed at £76,390,000.[2] The countries of the Continent had followed Great Britain in railway expansion. Belgium in 1845 had 343 miles of railway, built at a cost of $29,000,000; France 552 miles, at a cost of $51,000,000, with 1900 miles projected at a cost of $150,000,000; Germany, 2000 miles at a cost of $77,000,000, with 2300 miles projected; and the United States, 3688 miles at a cost of $88,000,000, with 5624 miles under construction at an estimated cost of $134,000,000.[3] The effect of this great absorption of the savings of the community in a single class of enterprises was illustrated in an incidental way when Parliament in 1846 required all railway companies intending to apply for

[1] McCarthy, I., 278–82.

[2] Report of the Lords' Committee, Gilbart, I., 329–30.

[3] Levi, 303–304.

incorporation to lodge ten per cent. of their capital within fifteen days after the beginning of the Parliamentary session. It was feared that the notes issued under the Bank Act of 1844 would prove insufficient to make these payments and it was arranged that the £14,000,000 found to be required should be obtained by daily payments deposited in the Bank of England and immediately loaned out again for further payments.[1]

The harvests of 1842, 1843, and 1844 were abundant, large savings were made by the British nation, the quantity of capital required to be invested in goods in stock was reduced by improvements in the means of transit, and bullion rapidly accumulated in the Bank of England. Discount rates at the bank fell as low as one and three-quarters per cent. on the best bills and after some fluctuations stood at three per cent. from August, 1846, to January 16, 1847. The failure of the potato crop in Ireland in 1845, followed by a worse failure in 1846, required the exportation of large quantities of bullion to pay for foreign grain, and the bullion holdings of the bank decreased from £15,163,000 on December 19, 1846, to £9,867,000 on April 10, 1847. The banking reserve in the meantime had fallen from £8,864,000 to £2,558,000. A panic stared the market in the face for a moment and discount among private bankers rose to ten and twelve per cent. The rise in the bank rate, however, stopped the flow of bullion and a sum of £100,000 which had been actually put on shipboard for America was relanded.[2] The pressure passed off for a time and the bullion in the bank at the end of June had increased to £10,526,000 and the banking reserve to £5,625,000.

The relief was only temporary. A series of heavy failures came crowding on each other's heels in August, involving liabilities of £1,200,000 in the week ending August 16th and £15,000,000 by the end of October. Saunderson & Co., a leading firm of bill brokers, stopped payment in the middle

[1] Gilbert, I., 335.

[2] MacLeod, *Theory of Credit*, II., 796.

of September, heavily involved with leading houses in the corn trade. Firms in the India trade were crippled by the long credits afforded and were compelled to suspend. Merchants whose own business was sound were ruined by their reckless speculations in railroad securities. The directors of the Bank of England realized that heroic measures were required to save the bank and on October 2, 1847, advanced the bank rate to five and a half per cent. and refused to make advances on stock or on Exchequer bills. The bullion had fallen again to £8,565,000 and the banking reserve to £3,409,000. The refusal to make advances on public securities caused wild excitement on the stock exchange, a fall in the price of Consols, and the disappearance of coin and bank-notes into private hoards. The Bank of England was reduced to the choice of bringing business to a standstill, by refusing all further discounts and pulling down the entire commercial structure in a shapeless mass of ruins, or breaking through the shackles placed upon its action by the Bank Act of 1844.

The government waited until the situation was desperate, in the hope that the pressure would pass away, as that of April had done, without the necessity for suspending the law. The reserve dropped to £1,176,000 and the government finally acted, late on Saturday, October 23d, and notified the bank that they would seek a bill of indemnity from Parliament if notes were issued in excess of the limit imposed by the Act at a rate of discount not less than nine per cent. The effect was magical. The knowledge that money might be had to meet demands instantly destroyed the desire for it. The bank prepared £400,000 in additional notes, but it was not found necessary to issue them. Notes which had been hoarded, under the impression that the limit of issues fixed by the Act would soon be reached and all relief cut off from the business community, came pouring from their hiding places; gold which had been stored in safe deposit vaults was brought back to the banks for deposit, and both the bullion and the banking reserve of the Bank of England rapidly returned to safe proportions.

France suffered less keenly than England in 1846 from the insufficiency of the crops, but the exportation of bullion, under the demands of the London market and in payment for grain, carried the reserve of the Bank of France down from 252,000,000 francs on July 1, 1846, to 80,000,000 francs on January 1, 1847. The bank was besieged for discounts, purchased gold and silver in the provinces at a premium, and sold 20,000,000 francs in French securities to the Barings of London for gold. The crisis was so intense that the management of the bank decided on January 14, 1847, for the first time in twenty-seven years, to raise the rate of discount from four to five per cent. The outflow of specie ceased and the reserve rose from 78,000,000,000 francs on January 15th to 110,000,000 francs on March 16th. The Emperor of Russia came to the rescue of the bank and offered to buy French public securities to the amount of 50,000,000 francs.[1] The bank accepted the offer and these securities went to Russia in payment for grain in place of the bullion which would otherwise have been exported. It was well understood in France that the efflux of gold was due to foreign payments and there was no disposition to present bank-notes for redemption in specie for domestic use.[2] The bank was so well equipped with bullion and confidence was so fully restored that France was little affected by the autumn pressure in England and discount was reduced on December 27, 1847, to the standard rate of four per cent. The breaking out of the revolution of 1848 arrested the development of business, and led the bank to seek the suspension of specie payments by authority of the government for the protection of its metallic reserve. The accumulation of bullion was unprecedented from 1848 to 1851 and attained on October 2, 1851, 626,000,000 francs, which was about 20,000,000 francs in excess of the entire circulation of bills.

[1] Noel I., 111. The negotiations were opened by the Russian ambassador at Paris, Count Kisselef, and a deputy governor of the bank went to St. Petersburg to conclude the transaction. The contract was signed March 17, 1847.

[2] Juglar, 417.

CHAPTER XXIII.

THE LATER CRISES OF THE LAST CENTURY.

Growth in the Popular Understanding of Crises—The Effect of the Gold Discoveries and Railway Building in 1857 and 1866—The Failure of Overend, Gurney, and Co. in 1866, and of the Barings in 1890—The Economic Effects of the American and Franco-Prussian Wars and the Long Period of Depression from 1873 to 1879.

THE economic crises of the closing half of the nineteenth century were of wider extent than some of the earlier crises, because of the wider area and magnitude of modern commerce, and the suffering which they inflicted was more keen; but they possessed fewer of the characteristics of unreasoning panic than the earlier crises of the century, because of the more accurate comprehension of the laws of banking which has been diffused in the business community. The panic in England was less intense in 1857 than in 1847, and the serious dangers of the Baring failure in 1890 were warded off by the union of the Bank of England and the great financial houses, without any outbreak of visible alarm. The United States in 1893 passed through an equally trying experience, and runs upon the banks by depositors were several times feared, but no such runs took place except in cases where there were well-founded reasons for distrust.

The Crisis of 1857.

The crisis of 1857 took its direction from two of the cardinal events of the nineteenth century,—the gold discoveries

in California and Australia and the great extension of railways. The gold discoveries worked a revolution in the proportions of the precious metals available for monetary uses, such as had only been worked by the discoveries of the treasures of Mexico and Peru more than three centuries before. The gold product of 358 years, from 1492 to 1850, had averaged only about $9,000,000 per year,[1] when it was suddenly swelled to an average of $133,000,000 from 1851 to 1860. President Buchanan estimated the production of the United States alone for the eight years ending in 1857 at $400,000,000. Prices did not advance in proportion to the increase in the volume of metallic money, because they were regulated by credit and because a large part of the new money was absorbed by the lateral expansion of commerce in quantity, but enterprises of all kinds received a stimulus unheard of in the history of the world.

To this influence of the doubling of the supply of the precious metals, as if by magic, was added the influence of railway extension. The railway mileage built in the United States in 1856 was 3642 miles,[2] and the construction for the nine years ending with 1857 was 21,000 miles. This construction, forming seven-ninths of the entire mileage of the country, had absorbed $700,000,000, largely in foreign capital. England and the Continent had witnessed a similar absorption of circulating capital. Over four thousand miles of railway had been built in England since 1850 at an expense of £150,000,000, doubling the mileage of the country.[3] So rapid was the development in every branch of American life that, in the language of Professor Von Holst, "It was

[1] Prof. Adolph Sootbeer gives the aggregate production from 1493 to 1850 as 13,258,000,000 marks ($3,150,000,000), and from 1851 to 1885 as 17,810,000,000 ($4,250,000,000).—*Bimetallism in Europe*, Sen. Ex. Doc. 34, 50th Cong., 1st Sess., 78. The production from 1885 to Dec. 31, 1895, was about $1,375,000,000.

[2] Sumner, *History of American Currency*, 180.

[3] These figures are taken from Mr. Rhodes' *History of the United States* (III., 53), who has made a careful compilation of the essential facts of the crisis in this country.

more and more lost sight of, that even in the age of steam, time must remain an essential factor in every process of development." It no longer seemed absurd to project railways into the wilderness, in the confident belief that they would open up new countries and create traffic where none existed. Immigration lent its aid to the natural growth of population, and the American people, under these combined influences, "worked themselves deeper and deeper into the delusion that the fancy could scarcely keep pace with the reality, and were thus led to mould the reality in their minds in accordance with what imagination pictured to them." [1]

There were signs of a tight money market in both the United States and England for several years before 1857. Bad crops and the diminution of foreign investments caused uneasiness among the Western banks as early as the summer of 1853. They drew heavily upon their balances in New York to replace the capital sunk in railway enterprises, and

[1] Von Holst, VI., 104. It was argued at the time of the panic of 1857, and has been maintained since, that the crash was caused by the low tariff of 1846, which led to large exports of specie to make payments for foreign goods and drained the country of metallic money. Mr. Rhodes, who will not be accused of partiality to the administration of either Polk or Buchanan, says that "in this reasoning cause and effect are confused, and in part, at least, inverted. It was the export of specie which increased the importations of merchandise, and not the importations of merchandise which increased the export of specie." He shows that during the nine years ending June 30, 1857, the excess of the exports of specie over imports was $271,000,000, and that during the same period there was a production of gold in the United States of about $477,500,000, leaving a net increase of specie of about $206,000,000. The net increase in specie in circulation shown by the Treasury estimates during this period was only $148,000,000, the remainder having been absorbed in the arts, but this amount was more than sufficient for American monetary uses, and such export of specie as occurred probably tended to restrain speculation rather than stimulate it. Mr. Rhodes expresses his obligations for this part of his history to Prof. Edward G. Bourne of Adelbert College.—*History of the United States*, III., 51–52. Prof. Max Wirth, the eminent German historian of economic crises, makes no mention of the tariff among the causes of the crisis of 1857.

many were compelled to suspend payment. The Crimean War led to speculation in shipping in England and some perturbation in business circles. The anticipation of trouble, however, as the result of the war, made money lenders cautious and prevented serious embarrassment until the summer of 1855. The Bank of England in that year suffered a serious drain of bullion, which carried its supply down from £18,169,000 on June 23d to £11,752,300 on October 13th. This drain continued, in spite of advances in the discount rate by successive steps, from three and a half per cent. during the summer to six per cent. on October 18th, and finally to seven per cent. on November 8th. The volume of trade did not seem to yield to the pressure of high rates of interest, and prices continued to climb upward,[1] but the bullion in the bank was kept nearly stationary through the year 1856. The tightness of the money market continued into the summer of 1857, when on August 17th the bullion stood at £10,606,000 and the rate of discount was five and a half per cent.

The situation in the United States was complicated, as it was in France, by the changes in the metallic circulation caused by the great production of gold. Gold took the place of silver as the overvalued metal at the coinage ratio, was invariably chosen by debtors for payments, and silver, having become the dearer metal, disappeared from circulation, in spite of bimetallic enactments, under the relentless operation of Gresham's law. The Secretary of the Treasury attempted in 1853 to relieve the contraction thus caused by paying for silver at the mint in gold, which would be added to the circulation.[2] The banks, in spite of their rapid increase, were unable to keep pace with the demand for loanable capital which resulted from the fever of speculation.[3]

[1] Juglar, 363.

[2] Kinley, 175.

[3] The number of banks increased from 715 in 1847 to 1416 in 1857, and the loans and discounts from $310,282,945 to $684,456,887. The increase in the note circulation was from $105,519,766 to $214,778,822. The circulation fell in 1858 to $155,208,344 and the specie holdings of

The specie reserves of the New York banks were strengthened for a time by government bond purchases and they were able to expand their loans. Foreign capital continued to flow into the United States and the bubble of speculation to be blown to the extremist tension.

Conditions were ripe both in Europe and America for a crash, when the impulse came on August 24, 1857, from the failure of the Ohio Life Insurance and Trust Co., of Cincinnati and New York, with reported liabilities of $7,000,000. A panic followed on the New York Stock Exchange, stocks fell, money was hoarded and loaned only at extravagant rates, deposits began to disappear from the banks, and late in September a run began on the banks of Philadelphia. They were compelled to suspend specie payments on September 26th and were followed by the New York City banks on October 13th. The early part of October had witnessed the failure of the Illinois Central Railroad, the New York and Erie, and the Michigan Central, and the run upon the New York banks for the withdrawal of their deposits followed close upon these events.[1] Prices of commodities tumbled with the price of stocks and the farmers felt the pinch in the depreciation of wheat, flour and pork as well as in the fall in real estate.

Money continued tight in England up to the autumn of 1857 and many complaints were made against the Bank of England for the high rate of discount. The news of the failure of the Ohio Life and Trust Co. caused intense alarm

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the banks, which had not suffered during the crisis, rose from $58,349,838 in 1857 to $74,412,832 in 1858 and to $104,537,818 in 1859. M. Juglar points out that it was not increase of circulation which caused expansion so much as "the attraction of deposits by high interest and the lending of them to reckless speculators."—*Des Crises Commerciales*, 268.

[1] The New York banks contracted their discounts from $122,000,000 on August 8th to $97,200,000 on October 17th. The constitution of the State of New York forbade suspension of specie payments directly or indirectly, but the judges of the Supreme Court met and agreed not to grant any injunction unless the bank appeared to be insolvent or guilty of fraud.—Sumner, *History of American Currency*, 184.

for the £80,000,000 of English money which was believed to be invested in American securities. A group of speculators added to the alarm in London by forming a combination to "bear" the market, by finding flaws in securities and working through the press to excite general distrust and depress prices.[1] The high rates of interest in New York began to attract gold from Hamburg; the Bank of France lost 25,000,000 francs in a single week, and the bullion in the Bank of England declined to £8,991,000 on October 19th. The great house of Dennistoun stopped payment on November 7th, with liabilities of nearly £2,000,000, the Western Bank of Scotland closed its doors two days later under appalling revelations of mismanagement and loss, the City of Glasgow Bank suspended, and the banking reserve of the Bank of England dropped on November 11th to £1,462,000.

The money actually in London in the banking department of the Bank of England on this eventful Wednesday night consisted of £375,005 in notes, £310,784 in gold coin, and £44,046 in silver coin. The bank could not have held out a day longer under the Act of 1844. It would have been obliged to suspend discounts not later than Friday and this would have been followed by a run for their reserves on the part of the stock banks, the bill brokers, and the private bankers, who had deposits at the Bank of England to the amount of £5,458,000. At the last moment the Bank Act was suspended. A letter reached the bank on November 12th, authorizing them to issue notes in excess of the legal limit, provided they maintained the rate of discount at ten per cent. Public excitement was suddenly calmed, but the demand for discounts continued heavy for more than a fortnight. The bank issued £2,000,000 in notes above the statutory limit, but the maximum in the hands of the public was £928,000 on November 20th. The remainder were added to the banking reserve. The governor of the bank afterwards testified that there was less acute panic in 1857 than in 1847, but that the real commercial pressure was more

[1] *London Times*, Sept. 10, 1857, quoted by Gilbart, II., 337.

intense. This may be judged from the fact that the aggregate loans by discounts and advances on stocks by the Bank of England were £12,645,000 from November 12th to December 1st.[1] Greater caution was shown than on former occasions in reducing the discount rate, and it was maintained as high as five per cent. in 1858 until the bullion had returned to £15,000,000.[2]

France and other countries of the Continent suffered in the crisis of 1857, though less acutely than England and America, because of the smaller scope of their commercial affairs. The establishment of the Second Empire in France gave an assurance of security to the mercantile classes, which was shaken for only a moment at the outbreak of the Crimean War. Business resumed its activity when it appeared that the operations of the war would be confined substantially to the East and the discounts of the Bank of France rose from the maximum of 154,000,000 francs ($29,000,000) in 1851 to 628,000,000 francs ($121,000,000) in 1857. The bank found it necessary to raise the discount rate to six per cent. in the autumn of 1856 and found its specie reserve at Paris reduced in January, 1857, to 72,000,000 francs ($14,000,000). One of the surprising features of the panic of 1857 was the disappearance of gold from circulation in spite of the enormous production of the preceding ten years. The Bank of France was continually in the market as a purchaser of bullion and expended 14,000,000 francs in 1855, 1856, and 1857 in premiums on 1,274,508,519 francs ($250,000,000) in gold bullion.[3]

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[1] Levi, 404.

[2] MacLeod, *Theory and Practice of Banking*, II., 190.

[3] Juglar, 422. This disappearance of gold from sight, when the quantity in the world available for monetary uses had probably increased more than fifty per cent. in ten years, throws an interesting light on the suggestion of Mr. Forssell, the Swedish delegate to the international monetary conference of 1892, that an attempt to create a monetary union wide enough to prevent exports of the metal under-valued in the coinage laws would be followed by its disappearance within the union.—*Conférence Monétaire Internationale*, Procès Verbaux, 246.

Hamburg, with her purely metallic currency, did not escape the violence of the storm. The rate of discount reached nine per cent. and 145 failures occurred, with reported liabilities of $100,000,000.[1] An attempt was made to sustain credit by combination among the leading merchants, but it failed and resort was had to the government, which borrowed 10,000,000 marks from Austria for discounting commercial bills. The Norwegian and Danish governments were also obliged to contract loans for the benefit of the mercantile community, and in Sweden the National Bank was authorized to borrow abroad 12,000,000 rix dollars, to be apportioned among the different towns.[2] In Prussia the Jewish houses suffered more than the banks, and complaint was made that the substantial monopoly of the Bank of Prussia injured credit by the contraction of the volume of circulation. The laws against usury were suspended and the banks were authorized to discount paper secured by either raw materials or manufactured goods.

The Crisis of 1864–66.

The years following the outbreak of the American civil war were years of financial disturbance in both Europe and America, partly as the result of influences set in operation by the war, and partly as the result of independent influences whose effect was intensified by the operation of the others. Periods which witness the turning of business from its ordinary courses into new channels are always periods of uneasiness, of unusual risks and of speculative tendencies. This was the character of the entire period from 1861 to 1866. The great discoveries of gold which had lent their brilliant hue to the dreams of American business men before the crisis of 1857 began to have a more marked effect in Europe a few years later. Their effect was heightened by the fact that at the close of 1861 the banks and Treasury of the United States suspended specie payments and gold flowed

[1] Courtois, 235.

[2] Levi, 405.

with an accelerated current towards Europe. The net gold exports from the United States in 1862 were $21,532,892 ; in 1863, $56,632,300 ; in 1864, $89,484,865 ; and in 1865, $51,-882,805. These great additions to the monetary supply of Europe produced only a slight effect upon prices,[1] but they proved a great stimulus to business activity, because of the means of conducting exchanges which they put in circulation in countries formerly without such means. The effect in France is described by an eminent French writer,[2] in the following terms :

> In those *arrondissements* and cantons where formerly the bill was a myth and the gold louis a phenomenon, hundreds of thousands of francs and even millions in specie and in bills are now in continuous rotation, promoting a movement of transactions which grow in intensity and extent day by day. They constitute a potent dike against depression and depreciation. The ancient possessor of monetary capital is neither robbed nor defrauded by this increase in the quantity of instruments of circulation, whether the increase consists in real gold or in credit gold (*or supposé*). On the contrary, he gains as much by it, more perhaps, than the general public. The superior activity of exchanges assures to the aggregate of circulating capital employment more fertile, more constant, and, inasmuch as it stimulates production and renders products more abundant and less dear, it even increases the value and the purchasing power of the pre-existing gold.

The news of war in America had an immediate effect upon the price of cotton and upon the London money market. The first influence upon the Bank of England, before the suspension of specie payments in the United States, was a loss of bullion and an increase of the discount rate on February 14, 1861, to eight per cent. The United States became smaller purchasers than before from Europe and if they had remained on a specie basis might have exacted the price of

[1] Prof. Jevons, who accepts the quantitative theory of money sufficiently to make a careful mathematical calculation of the effects of the new gold, declares "that ten per cent. may be taken as the best approximation which we can get to the rise of prices between 1845–50 and 1860–62."—*Investigations in Currency and Finance*, 58.

[2] Horn, 264.

their exports for a time in specie. The opposite policy caused bullion to flow freely into the Bank of England and permitted the gradual reduction of the discount rate to two and a half per cent. in January, 1862. The high price of cotton still required specie exports, but not to the United States. The blockade of the Southern ports compelled English mills to seek their raw materials in other markets. India, Egypt, and China were appealed to, and it was not possible to compensate this new trade at once by exports of merchandise. It had to be settled, especially in the case of India, by exports of silver from Great Britain.[1] France felt the counterstroke of this movement in the steady export of silver in exchange for gold. Silver was more valuable as bullion than at the ratio fixed by the French coinage laws and was sold at a premium for gold imported from England and the United States. The Bank of France was driven to making its redemptions in gold, in order to prevent a run for silver. The bank not only exchanged 50,000,000 francs in silver for an equal sum in gold, at the coinage ratio, with the Bank of England, but in November, 1860, effected a like exchange of 30,000,000 francs with Russia and in July, 1861, of 6,000,000 francs with the Bank of Italy.[2]

The reduction of the cotton supply, the derangement caused by the new supplies of gold, and the accumulation of capital in Great Britain as the result of the extended use of machinery, gave a feverishness and speculative character to the money market which recalled the manias of 1825 and 1847 in Great Britain and of 1837 and 1857 in the United States. One of the new elements which entered into the problem in Great Britain was the creation of companies of

[1] The net imports of silver into India for the four years ending March 31, 1866, were 54,094,337 tens of rupees, or 13,523,584 tens of rupees per year, while the bills on India sold by the home government were 29,409,469 tens of rupees, or 7,352,368 tens of rupees per year. The annual average for the five years ending with 1860 was 10,072,495 tens of rupees in silver and 992,569 in bills. The ten of rupees was about equal to £1.

[2] Juglar, 426.

limited liability. Such companies were only created by special charter prior to 1855, and it was not until after the amendment of the Companies' Act in 1862 that their creation attained the proportions of a mania. A new form of financial enterprise which developed was the creation of stock companies to furnish funds for new enterprises upon pledge of their stock. A proposed railway would not await the slow process of placing its stock and bonds among investors, in order to obtain funds to begin construction, but would deposit these securities with a finance company, which would agree to accept its debts for a specified sum. The immediate service rendered by the finance company was simply the use of its name, and the dangers of this method of financing did not become obvious until these long-dated acceptances began to press upon the market. The finance companies were able to sell their own shares at high prices and thus obtained the funds with which to make advances to the railways and construction companies.[1]

This new method of financing, through great capitalists and banking companies, was legitimate within the limits of the strength of the guaranteeing companies, and the prospects of the new enterprises, and it afforded a method of setting in operation at once enterprises for which the capital could not formerly have been found without appealing to the clumsy methods of government finance. The new system was employed, however, without wisdom and sometimes without honesty during the sixties and it soon brought the inevitable crash. One of the most conspicuous of the new finance houses was that of Overend, Gurney, and Co., which made investments in railways in Great Britain, in cotton in the United States, and in new enterprises in India. The company commanded the unlimited confidence of the public, because of the high credit of the private firm which was turned into a limited company in July, 1865. The firm was already in debt at that time to the amount of £2,970,168 and the methods by which this money had been lost were reck-

[1] Levi, 462.

lessly continued by the limited company. The very confidence reposed in the company was to some extent the cause of its later fall, for it invited such large deposits that use had to be found for them at the expense of safety.

The craze for limited companies increased their number in England within a few years by nearly three hundred, with a nominal capital of £504,000,000. Many were abandoned before starting, others went into bankruptcy, and the projectors of some disappeared, leaving no record behind them. The deposits in the London joint stock banks increased from £43, 000,000 in 1860 to £91,000,000 in 1864, and the country and private banks probably held on the latter date £20,000,000 more. A large part of these deposits consisted of acceptances, which were confounded indiscriminately with cash and credits.[1] France had entered upon the policy of "financing," under the encouragement of Napoleon III., even in advance of England, and her great *Société de Crédit Mobilier* for several years paid tempting profits and was the model of similar creations across the channel.[2] But France and the Continent met their crisis in 1864. The rise of prices was arrested in January of that year and the Bank of France, by keeping its discount rate two per cent. below that in London, was obliged to purchase gold, from January to November, to the amount of 221,000,000 francs. Discounts fell off and business for the next six years was kept within conservative limits by the fear of war and the political uncertainties attending the decadence of the Second Empire.[3]

Deficient crops added their influence in 1862 to high prices for cotton to create a balance of trade adverse to England, but it was not until the close of 1863 that the exchanges became adverse, the metallic reserve of the Bank of England fell to £13,000,000, and the discount rate was gradually raised, until in December it stood at eight per cent. Bullion began to flow back into the bank, the rate was reduced,

[1] Juglar, 385.
[2] Levi, 461.
[3] Courtois, 255.

speculation revived, and a new increase to nine per cent. became necessary late in April, 1864. There was another lull until the autumn, when the prospect of peace in the United States caused a tumble in cotton and a smaller fall in prices of all commodities. The bank rate was again advanced to nine per cent. in September, there was an increase of £2,500,000 in discounts, and the pressure for ready money was so intense that Consols fell from 89 to 87. The year 1864 witnessed in a sense two crises in England,—the first resulting in the liquidation of the smaller tradesmen, the second involving the great capitalists. The liquidation of both these classes was completed on the Continent in 1864. The effects of the crisis crossed the oceans to Brazil and Australia and if they were not felt in the United States it was because the events of the war interrupted the regular movements of the economic system. Liquidation was not fully completed in England in the case of the great financiers and the spring of 1866 witnessed an after-clap more severe in its effects than the crisis of 1864.

The first gust of the storm of 1866 was the failure of the Joint-Stock Discount Company in February, which was followed in March by the suspension of Barned's Bank of Liverpool, with liabilities of £3,500,000.[1] The discount rate of the Bank of England, which had fallen to six per cent., was raised to seven per cent. on May 3d, eight per cent. on May 8th, nine per cent. on May 9th, and ten per cent. on May 10th. It was on the evening of the last named day, after banking hours, that the news spread of the greatest failure which had ever taken place in England. An action was pending in the courts against the Mid-Wales Railway Company, to recover £60,000, accepted by them and held by the great house of Overend, Gurney, and Co., and two other firms. Judgment was delivered on May 9th, to the effect that the railway company had no right to accept the bills and that they were of no validity.[2] The decision of

[1] Gilbart, II., 308.

[2] MacLeod, *Theory of Credit*, II., 832.

the court, coming at a season of growing alarm, caused a run upon Overend, Gurney, and Co., by depositors, and on the afternoon of May 10th the firm suspended with liabilities of £18,727,915.[1]

The next day, May 11th, known as "Black Friday," was long memorable in English financial history. Lombard Street became impassable with the surging crowd and extravagant rumors assailed the reputations of the strongest houses. The Bank of England extended accommodations during the day in loans and discounts to an amount exceeding £4,000,000, and the banking reserve was reduced close to £3,000,000. The Chancellor of the Exchequer announced these facts in the evening in the House of Commons and stated that the government had addressed a letter to the bank, authorizing the suspension of the Act of 1844. The announcement was received with cheers and the news had a marked effect in mitigating the panic the next day. The decision to authorize the extra issue was not reached until midnight, and a deputation from the bankers waited upon the Chancellor while the House was in session. One of the representatives of the joint stock banks is reported to have said to the representative of the Bank of England, "I can draw a couple of checks to-morrow morning which will shut you up at once."[2] The letter of the government, signed by

[1] These figures are taken from the report of the liquidators at a meeting for dissolving the company, held in London on November 16, 1893. It appeared that £8,266,048 of the liabilities was on account of bills re-discounted under the guarantee of the company and £6,018,835 was due creditors holding security. The proved claims were finally reduced to £4,913,382, including interest, and they were paid out of the proceeds of amounts realized from bills of exchange and other credits to the amount of £1,982,289; from assets of the old firm, £688,561; separate estates of the partners of the old firm, £909,870; cash and interest on investments, £60,273; and calls of £25 per share upon the shareholders, £2,088,286. The liquidators were enabled to return £626,945 to the contributories, and the various law costs and expenses of the twenty-seven years of liquidation were £188,953.—London *Bankers' Magazine*, Dec., 1893, LVI., 809.

[2] Gilbart, II., 319.

Lord John Russell and Mr. Gladstone, contained the following:

If, then, the directors of the Bank of England, proceeding upon the prudent rules of action by which their administration is usually governed, shall find that, in order to meet the wants of legitimate commerce, it be requisite to extend their discounts and advances upon approved securities, so as to require issues of notes beyond the limits fixed by law, Her Majesty's Government recommend that this necessity should be met immediately upon its occurrence, and in that event they will not fail to make application to Parliament for its sanction.

No such discount or advance, however, should be granted at a rate of interest less than ten per cent., and Her Majesty's Government reserve it to themselves to recommend, if they should see fit, the imposition of a higher rate. After deduction by the bank of whatever it may consider to be a fair charge for its risk, expense and trouble, the profits of these advances will accrue to the public.

The effect of the suspension of the Act of 1844 was so marked that it appeared the next day, which was Saturday, as if the crisis was at an end. The pressure upon the banks ceased for the moment, and the Bank of England did not find it necessary to use the authority to issue notes beyond the legal limits. The demands for discount continued large, but were met from the deposits, which were poured freely into the bank by the outside bankers when they were assured that their appeals for notes would be honored. Large commercial failures began again, however, during the week, which imperilled the banks holding their paper and led to new demands by depositors. The Bank of London paid out fifty per cent. of its deposits in cash and was obliged to stop, with liabilities, according to its last balance sheet, of £4,335,877. The Consolidated Bank came to its rescue, but was in its turn exhausted. The Agra and Masterman's Bank, with wide connections in India and the East, and obligations of £15,582,002, was also compelled to suspend payments. These banks had ample assets, but were unable to convert them into bank-notes and cash rapidly enough to meet the demand of their depositors. The magnitude of the demands upon the Bank of England after the authority was given to suspend the Bank Act, may be judged from the debate

which took place in the House of Commons on the evening of May 17th. The Chancellor of the Exchequer stated, in reply to a number of interrogations:

> The advances made by the Bank of England on government securities on Friday, the day of the panic, amounted to £919,000, on Saturday to £747,000, and on three subsequent days various amounts, making up the total amount advanced on these securities in five days to £2,874,000. Then with regard to the accommodation of commerce in general, the best measure that can be given of the manner in which the bank has exercised its functions is shown in this:—that it has made advances upon bills and has discounted bills to the extent of £9,350,000, making a total of advances and discounts in five days of £12,225,000.[1]

The rate of ten per cent. at the Bank of England was maintained from May 11th, to August 6th, and distrust of English investments was so keen that this high rate failed for a time to attract foreign capital from countries where interest rates ruled much lower. The rate of the Bank of France continued for months at four per cent. and the coin reserves of the bank remained unimpaired.[2] This circumstance was seized upon by critics of the rule of controlling the flow of bullion by the discount rate as proof that the rule was not based upon sound economic law. The simple truth was that the credit of English finance was shaken to its centre. A high rate of interest ceases to attract when grave doubt exists whether the principal will ever be repaid. England paid the penalty for the wide ramification of her credit system, and the severe shock which it received in 1866, in an almost universal fear that her great banks and finance companies, even the Bank of England itself, were on the verge of bankruptcy. The prevalence of a ten per cent. rate for

[1] Gilbart, II., 313.

[2] Liquidation in France had already taken place, in anticipation of war, and the suspension of specie payments in Italy sent large quantities of bullion over the Alps.—MacLeod, *Theory and Practice of Banking*, II., 196-97. M. Horn endeavors to trace the low rates in France to the agitation there against the monopoly of the Bank of France, but if such an influence operated, it was evidently only because other conditions concurred to make low rates safe.—*La Liberté des Banques*, 446.

three months was in itself a heavy fetter upon trade and strengthened the belief that there was something fundamentally wrong with English banking. The distrust abroad was profound enough to justify for a moment the phrase of Sir Stafford Northcote, that there was "a run upon England," and to wound the national pride with the unaccustomed fear that London was about to lose her pre-eminence over the money markets of the world.[1]

In the presence of such fears, an economic law which would operate under normal conditions of credit was temporarily suspended, just as in the past few years foreign capital has been persistently withdrawn from the United States, in spite of tempting opportunities for investment, because of the fear that they would abandon the gold standard. The cherished "convertibility of the bank-note" did not prevent the suspicion abroad that the British government intended to establish forced legal tender, and its intervention to permit the suspension of the Bank Act of 1844 was interpreted among those not familiar with the English banking system as a step in that direction. The Earl of Clarendon gave official testimony to the gravity of the situation, without accomplishing much to relieve it, by issuing a circular letter to the British embassies throughout Europe, stating that "Her Majesty's government have no reason to apprehend that there is any general want of soundness in the ordinary trade of this country which can give reasonable ground for anxiety or alarm, either in this country or abroad."[2] Distrust at home had not at any time extended to the solvency of the Bank of England, after the directors were authorized to borrow from the reserve in the issue department, and the bullion, never below £11,800,000, rose in December to £19,200,000. The discounts, which had risen during the acute stage of the panic to £33,400,000, fell gradually, with liquidations and the slackening of business, to £19,100,000.

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[1] Wolowski, *La Banque d'Angleterre*, etc., 133.

[2] Levi, 471.

The Depression of 1873–79.

The long period of depression which began with panics in Austria and the United States in 1873, and which had hardly terminated six years later, followed some of the most remarkable experiences of the waste of national resources, the sinking of capital, and changes in the economic order which the world has ever seen. National resources were wasted like water in three great wars,—that of Secession in the United States, that of Italy against Austria in 1866, and that of France against Germany in 1870. The direct cost of the American war, exclusive of pensions, was estimated at more than $5,500,000,000, to the government of the United States alone, exclusive of the cost to the South, the injury to private property, and the drain upon the productive power of the country.[1] The cost of the Franco-Prussian War, brief as its military operations proved to be, was estimated at a total, direct and indirect, of $2,700,000,000, of which $2,125,000,000 was the share of France and $575,000,000 the share of Germany.[2] The effect of an important war upon credit is to compel a forced liquidation of business transactions in advance of the time which would be set by the normal movements of a credit cycle. If this was the case during the Napoleonic wars, it has been more strikingly the case under modern conditions, with the great expansion of credit which they have involved. The United States, having escaped the crisis of 1866 by the forced liquidations of 1860 and 1861, was ripe for an explosion in 1873; while France, having been forced to liquidation in 1870, felt only the ripples of the crisis of 1873, which were wafted back from the storm in other countries.

The absorption of capital in great enterprises during the ten years prior to 1873 was as great as its waste in war. The average annual increase of railways in the United States from 1860 to 1867 was 1311 miles. The increase in 1869 was 4953 miles; in 1870, 5690 miles; in 1871, 7670 miles; in

[1] Bolles, III., 244.

[2] Giffen, I., 76.

1872, 6167 miles; and in 1873, after the panic had broken, 3948 miles.[1] The United States did not stand alone in railway expansion. In Russia, a system of 12,000 miles of railway had been almost entirely created since 1868; in Austria, eight years had witnessed an increase from 2200 to 6000 miles; and in South America, nearly $200,000,000 of English capital had been borrowed, mostly for railway enterprises.[2] The result of this network of new lines was the opening of great producing areas, which laid down their harvests in Liverpool and Hamburg at prices which crushed competition, forced down the prices of English and German agricultural lands, and threatened the earnings of the laborer. The great war indemnity paid by France to Germany accumulated such a surplus of loanable capital in the latter country that new manufacturing industries sprung up all over the Empire, which soon outran the demands of domestic consumption, and the agricultural population flocked rapidly from the country to the cities. In Prussia alone 687 new joint stock companies were founded between January 1, 1872, and July 1, 1873, with an aggregate capital of $481,045,000. The construction of the Suez Canal was completed in 1869, destroying the value of much pre-existing shipping, and the development of railway building gave extraordinary activity to mining, forced up the prices of iron and resulted in the establishment of many new foundries in Great Britain and the United States. To these causes of the loss and absorption of capital had to be added, during the period of liquidation, the effect of bad crops in Great Britain and the destruction of vineyards in France by the ravages of the phylloxera, to the value of $2,000,000,000.[3]

The world had gained greatly in productive power during the two decades ending in 1873, but the gain was not sufficient to offset the combined operation of all these causes of waste and these transformations of old conditions. The United States, revelling in the fool's paradise of forced legal tender paper currency, was subjected to several severe heats

[1] Gilbart, II., 353.

[2] Giffen, I., 113–14.

[3] Wells, 23.

and chills, while timid statesmen were waiting for the country "to grow up" to the volume of the currency. Great Britain poured out her capital in foreign loans, as if untaught by the history of previous losses, and the total securities floated were calculated at £505,000,000 in 1872 and £624,000,000 in 1873. The number of joint stock companies formed in Great Britain in 1872 was 1116, with a subscribed capital of £130,000,000, and British exports rose from £199,586,000 in 1870 to £255,165,000 in 1873.[1] Prices were inflated on every European bourse, and when the crash came the fall in securities on the Berlin market alone was estimated at 131,138,000 thalers. Loans taken in London to the amount of £614,228,300 were found wholly or partially in default in 1873 to the amount of £332,399,800 of the principal involved.[2]

Stringency was the chronic condition of the money market in the United States during the closing portions of 1872 and the spring and summer of 1873. The final crash came with the failure of trust companies in New York and Brooklyn early in September, 1873. They were followed on September 18th by the failure of Jay Cooke and Company, who were agents of the government and had been leaders of the powerful syndicate which had handled the refunding of the public debt. Credit was already greatly overstrained, runs took place on the banks of Washington, Philadelphia, and New York, nineteen banks and trust companies closed on September 19th, and the Stock Exchange was closed for ten days. Failures followed each other in quick succession, mills and foundries stopped, production ceased, and for six years the pall of depressed industry lay over the United

[1] The fact that loans are made chiefly in commodities rather than in currency is an important factor in finance and has had much to do with the development of English trade. The exporter furnishes the commodities, which have for him the character of sales for cash, because the bills which he draws are purchased by lenders of capital, for transmission to the borrowing country in payment for the new securities. The borrowing country, being thus permitted to purchase by the evidences of deferred payments, is able to become a much larger purchaser than would otherwise be the case.—London *Bankers' Magazine*, May, 1892, LIII., 739.

[2] Levi, 498.

States. Deposits in the national banks fell from $641,121,775 on June 13, 1873, to $540,510,602 on December 26th. The failures for four years showed aggregate liabilities of $775,865,000 and the railway bonds in default on January 1, 1876, amounted to $789,367,655.[1]

The Secretary of the Treasury endeavored to relieve the money market by paying out $24,000,000 in the purchase of bonds. Little of the money reached the New York banks and they found a more effectual expedient in the issue of clearing-house certificates.[2] This resource had been availed of during the forced liquidations of 1860 and other years of the war, but the amount had never before reached the figures which were attained in 1873. These certificates were issued by a committee, upon the deposit of approved securities by the banks taking out certificates, and were receivable in the settlement of the balances of the several banks at the clearing house. This made them the equivalent of currency in the bank reserves and released a corresponding amount of currency for other uses. The issues of clearing-house certificates at New York, on various occasions of stringency from their adoption to 1893, were as follows[3]:

YEAR.	FIRST ISSUE.	FINAL CANCELLATION.	TOTAL ISSUE.	MAXIMUM OUTSTANDING.
1860	Nov. 23	Mar. 9, 1861	$ 7,375,000	$ 6,860,000
1861	Sept. 16	Apr. 28, 1862	22,585,000	21,960,000
1863	Sept. 15	Feb. 1, 1864	11,471,000	9,608,000
1864	Feb. 29	June 13, 1864	17,728,000	16,418,000
1873	Sept. 22	Jan. 14, 1874	26,505,000	22,410,000
1884	May 15	June 6, 1884[4]	24,915,000	21,885,000
1890	Nov. 12	Feb. 7, 1891	16,645,000	15,205,000
1893	June 21	Nov. 1, 1893	41,490,000	38,280,000

[1] Wells, 6.

[2] Kinley, 185–86.

[3] *New York Journal of Commerce*, Jan. 16, 1896. The Philadelphia clearing house issued $6,785,000 in 1873. The banks paid six per cent. interest on the certificates held, which ensured their retirement when the emergency was passed.

[4] Except $250,000 issued to the Metropolitan National Bank, some of which were not paid until September 23, 1886.

The crash in Vienna came earlier than that in the United States. The German government became disquieted by the fever of speculation in Prussia and the creation of new joint stock companies, and the paper of many of these companies was refused acceptance by the Bank of Prussia. The speculators transferred their operations to Vienna and in the first quarter of 1873 $140,000,000, of so-called securities, but with little real security behind them, were issued at the Austrian capital. The Bank of Austria was permitted to loan largely on such securities, in order to keep the speculators from failure, but on May 27th, the morrow of the opening of the International Exposition, seventy failures occurred, and on the next day 110, involving establishments of the first importance. The Bourse was closed, the government suspended the limit upon the note issues of the bank, loans were made by the Treasury, and a syndicate of bankers was formed to make advances on sound securities.[1] A general panic was thus prevented, but credit was so far impaired that it was not until 1875 that business in Austria resumed its wonted activity.

The forced liquidations of the Franco-Prussian War caused severe pressure for a short time upon the reserves of the Bank of England ; but the early effect of the war, in driving international exchanges to London and Belgium, and sending capital there for safekeeping, was to flood the bank with money and to carry the discount rate downward from six per cent. on August 4th until it touched two and a half per cent. on September 29th. The terms of settlement of the French indemnity kept money in Great Britain for a time, and it was eagerly absorbed at low rates by traders and manufacturers.[2] The determination of Germany to establish the gold standard, and the heavy credits she had accumulated in London, began in 1873 to draw gold away from England, but the raising of the discount rate at the Bank of England, until it touched nine per cent. on September 25, 1873, attracted gold back from the Continent, Australia, and

[1] Juglar, 495.

[2] Gilbart, II., 350.

India, and 1873 and 1874 passed away with comparatively little disturbance.

The crisis in Great Britain was delayed until 1875, when several large firms doing business in South America went down. In May came the collapse of the Aberdare Iron Company, with liabilities of over £1,000,000, which dragged down two other large concerns and the brokerage firm of Sanderson and Company, with liabilities of about £7,000,000. The banks maintained a firm front and actual panic did not occur until June 15th, when Alexander Collie and Company, East India merchants, failed, with liabilities estimated at £3,000,000. Thirty firms followed them into the ditch during the following week and it was found that these firms, as in the case of those connected with the Aberdare Iron Company, were simply tools of Collie and Company, in floating their paper. The Bank of England was well equipped with bullion and notes, and sound firms were liberally assisted, without any advance in the rate of discount, which was only three and a half per cent. Many small firms went to the wall, but Great Britain was touched lightly by the crisis and confidence was only briefly shaken in 1875. The experience of 1878, when the City of Glasgow Bank failed with liabilities of £12,404,297, was also creditable to the soundness and conservatism of British banking. The banks increased their deposits in the Bank of England £7,000,000, while they drew down the cash reserves of the bank about £4,000,000. They thus strengthened themselves by actual cash in hand or credits on the Bank of England to the amount of £11,000,000. Several important failures occurred during the autumn of 1878, including that of the West of England Bank at Bristol, on December 9th, with liabilities of about £5,000,000, but the crisis gradually passed off during 1879 without a general run upon the solvent banks.

The Crisis of 1882–84.

The crisis in 1882 in Europe, which reacted upon the United States in 1884, was most severe in its economic ef-

fects in France, which had escaped the effects of the crisis of 1873 by the forced liquidation of the Franco-Prussian War. The severity of the crisis in France was due in a large measure to the education in the employment of negotiable securities which was afforded by the payment of the great war indemnity. The masses of the French people, little accustomed up to that time to any form of saving but in coin and lands, emptied their hoards in the purchase of national securities, partly from a great outburst of patriotic feeling, but partly also because they felt that the guarantee of the government gave safety and tangibility to engraved pieces of paper, which under other circumstances they would have refused to look upon as a sensible investment. The habit of accepting such securities once formed, and the advantage derived from their regular returns once enjoyed, it became easier to tempt the French peasant and workman to experiment with other securities of a less certain guarantee.[1] Investment societies, trust companies, and syndicates sprang up like mushrooms in the speculative atmosphere of Paris, and those which were upon too grand a scale for any but the great financiers and the rich had their imitators among the adventurers of the street, who accepted gratefully in instalments the petty savings of the poor.[2] The loans of the *Crédit Foncier* swelled from 50,000,000 francs in 1879 to 278,000,000 francs in 1881, while the *Crédit Général Français*, the *Union Générale*, and the *Banque de la Loire* were types of great investment companies whose shares ran brief careers of extravagant advances in price.[3]

It was not in France alone that speculation assumed a new development in the eighth decade of the century. Speculation in earlier times had been largely limited to the raw materials and finished products of commerce, and the bursting of the bubble had come when high prices made goods unmarketable and continuances of loans at the old rates could no longer be obtained at the banks. The much more

[1] Leroy-Beaulieu, II., 218.

[2] Jannet, 385–86.

[3] Juglar, 435.

complicated structure of modern commerce, the distribution of risks by margins and futures, sales for *report* and arbitrage, and the diffusion of savings and the taste for investment among all classes in civilized states, have given a new character to speculation and made the stock market a more sensitive barometer of business conditions than the more sluggish merchandise markets. Securities have become the most convenient means of settling international balances, and by their unrecorded transfers have impaired the value of the statistics of visible commerce. They have become in a large measure a substitute for money and have to be considered in dealing with monetary problems. The steady rise of national securities in recent years has been chiefly the result of the falling interest rates on capital and their safety as temporary investments, but shrewd speculators, by playing upon the ignorance of investors, have convinced them that the other securities upon the market were sure, in their hands, to pursue the same ascending course. Intoxicated by this prospect of paper riches, investors have measured their expenditures by their assumed wealth, have furnished occupations for the ministers of luxury, and have brought perturbation into the entire economic order.[1]

Marginal profits in stock speculations depend in several ways upon low rates for money, and these disappeared in England and France during the autumn of 1881. The United States resumed specie payments on January 1, 1879, and the current of gold drawn towards the country by the operations of the treasury was swelled by the abundant crops and large exports of the years which immediately followed. The merchandise exports from the United States in 1881 were

[1] "These effects of growing wealth have their effect even upon the public finances. Transactions being more numerous and being made at higher prices, the registration taxes give larger revenues. It is thus, that from 1875 to 1881, the receipts of the Treasury exceeded the official estimates by 580,701,788 francs, and this was made the occasion by the party in power for launching into foolish expenses, in the famous plan of public works of M. Freycinet and the purchase of little railway lines, which resulted in a series of loans in profound peace."—Jannet, 392.

$902,377,346,—an amount never before equalled, and never equalled afterwards until 1892. The excess of exports over imports of merchandise was $264,661,666 in 1879, $167,683,912 in 1880, and $259,712,718 in 1881. Europe was suffering from a deficiency of crops, for which, in the language of Mr. Wells, "in respect to duration and extent, there had been no parallel in four centuries."[1] The tide of gold, which had been outward for sixteen years, turned towards America in 1878, and the net gold imports were $77,119,371 in 1880, and $97,466,127 in 1881. The Bank of France found its reserve falling in the autumn of 1881, and endeavored to avoid too sharp an advance in the discount rate by paying light coin and charging a premium for bullion. The Bank of England raised its discount rate on October 6th from four to five per cent., and the Bank of France followed with a like advance on October 20th. The crash came in Paris and Lyons in January, 1882, with the collapse of the *Union Générale* and a fall in all classes of securities. The Lyons brokers sought and obtained succor from the Bank of France, to the amount of 100,000,000 francs, upon securities which would not ordinarily have been accepted, and the Paris agents of exchange obtained 80,000,000 francs, upon the guarantee of a syndicate of bankers. The sum of £924,000 was withdrawn from the Bank of England for France on January 30th, and £2,000,000 was drawn out during the week. The Bank of England discount rate was advanced on February 2d to six per cent., and private bankers, contrary to their usual custom, raised their rates to that of the bank.[2]

The counter-stroke of the crisis in the United States, which was delayed until 1884, was more financial than economic, but the multitude of failures caused intense alarm for a time and threatened to bring business to a standstill. The Marine Bank of New York suspended on May 5th, closely followed by the failure of the Metropolitan Bank, the exposure of the peculiar methods of John C. Eno, Ferdinand

[1] *Recent Economic Changes*, 6.

[2] Juglar, 396.

Ward, and George I. Seney and the collapse of smaller houses connected with them. Money went to one per cent. a day, the interior banks began to draw heavily upon their New York reserves, and it was hardly possible to obtain cash or credit upon the best securities.[1] The decision of the associated banks to issue Clearing-House certificates calmed the storm by degrees, but the failures of the year were computed to show liabilities of $240,000,000,[2] and deposits in the national banks fell from $1,060,778,388 on April 24th to $979,020,349 on June 20, 1884.

The Crisis of 1890.

The crisis of 1890 afforded a striking illustration of the better understanding of such events which has arisen within the past half century, and of the success of skilful and courageous financiers in dealing with them. The particular cause of the crisis was the heavy loans through the Barings to the Argentine Republic, but the years preceding 1890 had been marked, as in other such periods, by excessive speculation, the increase of joint stock companies and the inflation of prices. A part of this tendency to speculation was attributed, as in the case of the crisis of 1837, to the conversion of the public stocks or Consols in 1888, under the management of Chancellor Goschen, from three per cent. to two and three-quarters per cent. The returns of the registrar of joint stock companies showed the total amount of capital registered during 1888 to have been £353,781,594, and in 1889 £241,277,468, while the loans to the Argentine Republic alone in those two years were stated at £36,102,766 in 1888, and £29,223,341 in 1889.[3] Railway earnings

[1] It is apropos of this crisis that Mr. Henry Clews remarks that, "Were the banks allowed to use their reserves under such circumstances, a fund would be provided for mitigating the force of the crisis, and the danger might be gradually tided over; but, as it is, the banks can legally do little or nothing to avert panic; on the contrary, the law compels them to take a course which precipitates it."—*Twenty-eight Years in Wall Street*, 161.

[2] Juglar, 477.

[3] *Journal of the Institute of Bankers*, Jan., 1891, XII., 1.

were increasing, clearing-house transactions were multiplying, and the securities of the South American republics were eagerly accepted by investors under the endorsement of such a house as the Barings.

Money had been poured into the Argentine Republic for the development of banking, public works, and retail trade, until the natives might well have been convinced that their credit in London was without limit. A boom began in 1886 which carried up the price of lands, which a few years before could be had almost for the taking, to $50,000 per league, while suburban lots bounded upward from a few cents to several dollars per square metre. Extravagance and luxury ruled among the governing classes, and the banks which were opened in 1887 under the Guaranteed Banking Law advanced money without security, by the hundreds of thousands to men of prominence and by the thousands to their humbler followers. The requirement of payment by instalments disclosed the fact that the banks had made many bad debts, and it soon appeared that these had been covered up for a time by fraudulent over-issues of bank-notes. The legal circulation, which amounted to $160,000,000, or about $40 per capita, was increased by the fraudulent issue of $50,000,000 to $60,000,000 in additional paper. The National Bank, alone, exceeded its limit $26,000,000. Notes supposed to be redeemed were constantly reissued, and when the crash came paper money was so discredited that gold went to a premium of three hundred in paper, and tickets for a few cents were issued by barbers and retail stores to take the place of the small coins which disappeared.[1]

The interest rate at the Bank of England was gradually lowered during 1890, from six per cent. on February 20th, to three per cent. on April 17th, where it remained until June 26th. It was then raised to four per cent., and afterwards to five per cent., where it stood on Thursday, November 6th. Uneasiness began to be felt among well informed bankers over the increase in the acceptances assumed by the Barings

[1] "Gaucho Banking," London *Bankers' Magazine*, Jan., 1891, LI., 37-47.

and other houses, and the decline of securities indicated a more pressing demand for money and a slackening of business activity. The bank rate was advanced to six per cent. on Friday, November 7th, and ugly rumors were afloat in Lombard Street. The real cause of the uneasiness among the great financiers did not, however, become public property until a week later. It was made known on November 8th, to the Governor of the Bank of England, Mr. William Lidderdale, fortunately a man of great ability and decision of character, that the Barings were on the eve of suspending payment, with liabilities of £21,000,000.

Mr. Lidderdale believed, in spite of the unfortunate history of previous crises, that measures could be adopted which would prevent a crash. He accordingly perfected arrangements within the following week, by which the Bank of England was able to announce on November 14th that all the liabilities of Baring Brothers and Company would be provided for by the bank, and that any loss to the bank would be made good by a circle of guarantors embracing the greatest institutions of Great Britain. The joint stock banks of London, the leading banks of the provinces, and the joint stock banks of Scotland entered into a combination aggregating £15,000,000, "to make good to the Bank of England any loss which may appear whenever the Bank of England shall determine that the final liquidation of the liabilities of Messrs. Baring Brothers and Company has been completed, so far as in the opinion of the governors is practicable." This guarantee was to continue for three years, and afforded absolute assurance to the business community that no great losses to individuals and respectable houses would occur. The Chancellor of the Exchequer was in constant consultation with Mr. Lidderdale while the negotiations for the guarantee were going on and offered him the benefit of the suspension of the Bank Act of 1844, so as to permit the issue of additional notes, if he thought it desirable, but Mr. Lidderdale declined to foster alarm by admitting the necessity for the classic remedy of the great crises of 1847, 1857, and 1866.

Mr. Lidderdale preferred to keep within the law, and at the same time to equip the bank with the means of meeting heavy demands for notes, by borrowing gold from France, Russia, and other sources. The sum of £3,000,000 in gold was brought over under a special contract with the Bank of France,[1] £1,500,000 was obtained from St. Petersburgh, and £500,000 was drawn from other sources. All this sum of £5,000,000 thus became available as the guarantee of additional note issues if the pressure for money should become serious. Mr. Lidderdale would not even alarm the community by forcing up the rate of interest to an extreme point, but maintained it at six per cent. and insisted that the great joint stock banks should continue discounting, as usual.[2] These measures were so successful that the period of stress was passed without actual panic and liquidation set in without important failures. The note issues of the Bank of England increased from £34,507,580 on November 12th to £39,939,900 on November 26th, but the increase was almost exclusively in the notes held in the banking department and there was no unusual pressure for currency.

The firm of Baring Brothers and Company was reorganized as a limited company with a capital of £1,000,000, and made arrangements to continue business. The affairs of the Argentine Republic were found in an extremely bad shape and have not yet been entirely adjusted, but the surplus resources of the Barings enabled a gradual reduction of their liabilities outstanding at the time of the failure. The adjustment proceeded so rapidly that Mr. David Powell, the Governor of the Bank of England, was able, at a general court held on March 16, 1893, to make the following report :[3]

The liabilities, which have been increased during the past six months by a claim from the executors of the late T. C. Baring, now

[1] This loan was secured by the deposit of Exchequer bonds issued to the Bank of England by the British Government, in exchange for national debt stock. The cost of the transaction was £100,000, besides interest.—*Pol. Science Quar'ly*, March, 1894, IX., 23.

[2] MacLeod, *Theory of Credit*, II., 836.

[3] London *Bankers' Magazine*, April, 1893, LV., 610.

stand at £4,558,813, while the value of the assets under the new estimate stands at £4,908,935, giving an apparent surplus of £350,122. It will be seen that progress, though not so rapid as in the previous six months, has been made in the liquidation, the debt to the bank having been reduced in the past six months by £625,000. It may be well, however, to remind you how much has been effected since the guarantee was set on foot. The liabilities, which in the aggregate reached a total of £30,313,000, have been reduced, in a period of about two years and a quarter, to £4,558,813; nearly the whole of the "bills receivable," "remittances to come forward," etc., amounting to £21,193,664, have been got in without loss, and securities have been realized to the value of £4,560,523. It will be remembered that the period of three years, for which the guarantees were originally given, will expire in November next, and, looking to the question how far the liquidation could be carried out without material loss before that date, it was felt desirable, in the interests of the guarantors, that the time should be extended; and I am happy to be able to say, that practically the whole body of guarantors have consented to continue their guarantee for one-fourth of the original amount—which is all that is required—for one year certain from November next, and for a further period of one year if deemed expedient in the interests of the guarantors.[1]

The intimate connection between the world's markets is indicated by the fact that the withdrawal of British deposits in Australia caused a stringency which foreshadowed the crisis of 1893, and that the Imperial Bank of Germany forbore for a time making drafts upon London.[2] The stringency which occurred in the United States, however, in the autumn of 1890 came before the Baring crisis and was less intimately related to that event than to the accumulation of surplus revenues in the Treasury. This had been so serious a danger for several years that Secretary Fairchild in 1888 deposited a large part of the surplus in national banks, while he extended the policy, which he had already inaugurated, of purchasing unmatured bonds at a premium. The purchase of bonds was continued by Secretary Windom, and was pursued on a large scale during the summer and autumn

[1] The guarantors were relieved of further liability towards the close of 1894, and the further settlements were undertaken by a private company.

[2] Jannet, 113.

of 1890. "The amount of public money set free within seventy-five days by these several disbursements," Secretary Windom declared, referring to circulars issued up to September 6th, "was nearly $76,660,000, and the net gain to circulation was not less than forty-five millions of dollars, yet the financial conditions made further prompt disbursements imperatively necessary."[1] Another offer to purchase these bonds was issued on September 13, 1890, and the total disbursements between June 30th and the close of September were $98,276,682, of which $75,828,200 was on the principal of bonds redeemed and the remainder for interest and premiums. The resources of the Treasury were practically exhausted and no assistance could be given to the money market when the reflex action of the Baring crisis was felt two months later in the United States. A number of important failures occurred, but the more disastrous results of the exhaustion of the Treasury were reserved for 1893.

[1] Finance Report, 1890, xxix.

CHAPTER XXIV.

THE CRISIS OF 1893.

The Reverberation of the Baring Crash over Europe, America, and Australia—Distrust of American Silver Legislation—The Failure of the Brussels Conference, the Suspension of Free Coinage in India, and the Coming of the Panic—The Shrinkage of Values—Repeal of the Sherman Law and the Bond Contract of 1895—Land Speculation and Bad Banking in Australia.

THE financial crisis of 1893 was in a large measure an afterclap of the Baring failure in 1890. Many millions of British money had been invested in American and Australian securities and the discredit which fell upon Argentine and other South American investments with the failure of the Barings resulted in an irresistible movement to unload such securities and transfer European capital to home investments. Such a tendency would in itself have seriously crippled the great enterprises carried on in the United States, South America, and Australia on foreign capital, even if those countries had not been in any way at fault. Results proved that, while credit rested upon no such rotten basis in the United States and Australia as in Argentina, there had been much sinking of circulating capital in unproductive enterprises and a tendency towards unwise economic policies which had fettered the industries of those countries and driven gold from its legitimate place in their monetary circulation. Circumstances which might have impaired American and Australian credit under any conditions were emphasized by the general distrust aroused by the Baring failure and it required only the rude test of the withdrawal of foreign support to confirm the suspicions of foreign inves-

tors and bring to a head the real evils of the economic situation.

The first shock was felt in Australia, whose people had been congratulating themselves upon their rapidly accumulating wealth and their swelling bank credits, based in reality upon inflated valuations of real estate and of agricultural products. The shock was soon communicated to the United States and its reverberations affected the stock markets of Berlin and Vienna, checked the efforts of Austria-Hungary to establish the gold standard, and drove Austrian securities homeward from Germany as the result of the scramble for ready cash in the Berlin market. Italy was affected by the prevailing distrust, and the evils generated by corruption among her bankers and public men were intensified by the return of Italian securities and the steady outflow of gold and even of subsidiary silver coins under the pressure of a depreciated paper currency. The *Crédit Mobilier Italien*, with a capital of 75,000,000 lires ($14,500,000), was forced to suspend by the difficulty of calling up advances, with deposits of 50,425,000 lires and advances of 89,109,000 lires.[1] France saw her importations shrink from 4,767,867,000 francs ($920,000,000) in 1891 to 3,936,720,000 francs ($760,000,000) in 1893. Even Turkey suffered from the fall in the prices of the products of agriculture, which constitute the larger part of her exportations. Opium within the space of a few years fell twenty-four per cent., wool fifteen per cent., and raisins eight per cent.[2]

The crisis in the United States attracted the most attention, because of the magnitude of their commercial interests and of the investments of foreign capital in their railways, breweries, cattle ranges and public securities. Foreign investments in the United States would have required large payments to Europe prior to 1893 if American enterprises had not proved up to that time so attractive that the interest upon them was constantly reinvested. The result, according to the acute observation of M. Arthur Raffalovich, was

[1] *Revue des Banques*, Jan., 1894, XIII., 15.

[2] *Revue des Banques*, Aug., 1894, XIII., 166.

that "the true indebtedness of the United States abroad had been completely hidden by the influx of foreign capital. What the nation had to pay in interest on railway and municipal obligations and industrial investments had never been felt as a charge upon commerce, in consequence of the compensation which resulted from the uninterrupted entry of capital placed by Europe."[1] The withdrawal of this capital,—even the mere suspension of the process of reinvesting it,—meant heavy payments in gold or merchandise to Europe, without compensation in returning gold or goods. The annual payments required to Europe, outside those compensated by American exports, were estimated by Mr. Heidlebach, a New York banker, at $350,000,000, and the principal of the debt upon which interest was due was computed at not less than two billions of dollars.[2] The withdrawal of a large portion of this productive loan was the price which the United States were called upon to pay for political manœuvres which aroused the fear that they would abandon the gold standard and make silver the basis of their monetary system.[3]

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[1] *Le Marché Financier en 1893–1894*, 255.

[2] These figures were largely mere estimates until a careful computation was made in the *Journal of Commerce and Commercial Bulletin*, July 8, 1895, based upon inquiries among brokers, steamship agents, and others possessing actual knowledge. This investigation made the total annual indebtedness to Europe, exclusive of merchandise movements in either direction, $175,475,000 and the credits on the other side $29,750,000, leaving a net indebtedness by the United States of $145,725,000. The leading debtor item was $90,000,000 on investment account, which would represent a capital of at least $2,500,000,000. The creditor items included $14,000,000 brought by immigrants, $14,850,000 for outlays of foreign vessels in American ports, and $1,900,000 for outward earnings of American vessels. These figures take no account of the portion of the annual debt which may be settled by new securities.

[3] This tendency to the withdrawal of foreign capital was observed to some extent after the passage of the Bland bill and the Senate resolution offered by Senator Matthews of Ohio, that the obligations of the United States were legally payable in silver. *Vide London Economist*, September 28, 1878; Leroy-Beaulieu, II., 229. The tendency only became marked, however, after the passage of the law of 1890.

A combination of influences worked together to induce an unhealthy condition of industry and finance and to bring about the collapse of 1893. The passage of the Sherman silver law of 1890 was not the absolutely unique cause of the crash of three years later, but it contributed powerfully to that result, indirectly as well as directly. The withdrawal of gold from the United States Treasury pursued an almost uninterrupted course from the moment of the enactment of the Sherman silver law until the outbreak of the panic. The following table, brought down for convenience to a more recent date, will show the progress of this depletion of the gold reserve:

DATE.	TOTAL GOLD IN TREASURY.	GOLD CERTIFICATES IN CIRCULATION.	NET GOLD RESERVE.
February 28, 1889	$326,456,697	$130,210,717	$196,245,980
June 30, 1889	303,504,319	116,792,759	186,711,560
December 31, 1889	313,818,941	122,985,889	190,833,052
June 30, 1890	321,612,424	131,380,019	190,232,405
December 31, 1890	293,020,214	144,047,279	148,972,935
June 30, 1891	258,518,122	120,850,399	117,667,723
December 31, 1891	278,846,750	148,106,119	130,740,631
June 30, 1892	255,577,705	141,235,339	114,342,367
December 31, 1892	238,359,801	117,093,139	121,266,663
June 30, 1893	188,455,432	92,970,019	95,485,413
December 31, 1893	158,303,779	77,412,179	80,891,600
June 30, 1894	131,217,434	66,344,409	64,873,025
December 31, 1894	139,606,354	53,361,909	86,244,445
June 30, 1895	155,893,931	48,381,569	107,512,362
December 31, 1895	113,198,707	49,936,439	49,845,507
March 16, 1896	171,356,965	43,426,829	127,930,136

Gold exports began in large volume the month the Sherman law was approved and reached a total in the fiscal year 1891 of $86,362,654; in 1892 of $50,195,327; and in 1893 of $108,680,844. There were imports during the months in which the American crops were marketed, but the three years contributed an excess of exports of $68,130,087 in 1891, $495,873 in 1892, and $87,506,463 in 1893. The theory of Gresham's law, that the departure of gold denotes the presence of a poorer currency behind the gold, expelling it from the country, was verified by the manner in which the

gold went out as the new Treasury notes were pumped into the circulation at the rate of $4,500,000 per month. The Treasury notes issued undes the Sherman law up to June 30, 1893, were $147,190,227; the net gold exports from the United States from June 30, 1890, to June 30, 1893, were $156,132,423; and the reduction of the aggregate gold in the Treasury during the same period was $133,156,991. Other causes than the mere addition of the notes to the circulating medium doubtless contributed to the expulsion of gold, but the coincidence of these three items,—the loss of gold by the Treasury, its export from the United States, and the issues of notes,—is at least striking.

From the moment that the Sherman law was enacted, the Treasury of the United States was under the necessity of constant expedients to keep its gold and replenish it when it was lost. The government availed itself of every opportunity to obtain gold in exchanges when there was a demand for small notes by offering greater conveniences to those who tendered gold in exchange for paper than to those who tendered other forms of currency. Appeals to the generosity and patriotism of the national banks, which still held a considerable reserve of gold, were frequently made during the autumn of 1892 and the early months of 1893. New appeals of this sort were made under the administration of President Cleveland and the gold reserve was increased from $90,722,958 on June 10, 1893, to $97,286,677 on July 10th, by the efforts of a banking combination in New York, and by leading bankers of Boston, Baltimore, Chicago, and Philadelphia.

These devices were unavailing to permanently arrest the combined effects of the infusion of paper into the currency and the period of speculation and large imports of foreign merchandise which had set in. Funds were raised for working alleged tin-mines in South Dakota; vast tracts of land were purchased in Florida to be unloaded as sugar lands upon foreign investors under the guarantee of the government bounty upon sugar; and new towns sprang up all over the South, dowered in the imagination of their projectors

with infinite possibilities of mineral wealth and manufacturing development, but which proved in fact little more than bottomless pits for the millions of northern capital spent in laying them out. It was the same with suburban improvements in the neighborhood of the great cities as with the "boom" towns of the South. Millions were sunk in improvements, in advance of actual demand, upon property for which no purchasers could be found when people began to ask themselves what was the basis of reality beneath inflated and fictitious values. Railroad building was not so marked a feature of the years preceding the panic of 1893 as of earlier panics, but there was a great demand for capital for equipping street railways with new power and the railways, as usual, were among the first to feel the effects of slakening industry.[1] The conviction that the country was upon the high road of prosperity led to extravagant expenditure by individuals, corporations, municipalities, and the Federal government. Foreign goods poured into the country at an accelerating velocity until the volume of imports rose from $745,131,652 in 1889 to $866,400,922 in 1893. The scarcity of the crops in Europe in 1891 caused a great demand upon the United States to supply the deficiency, and American exports of $1,015,732,011 in the fiscal year ending June 30, 1892, offset in a measure the stream of imports, arrested the loss of gold, and delayed the crisis which might otherwise have sooner followed the operation of the Sherman law.

The relief which the farmers were thus enabled to bring to the fiscal situation of the country was but temporary. Europe was just recovering from a crisis and a part of the

[1] A list of dividends paid in 1893 which had ceased to be paid in 1895 showed a total of $61,710,000 per year. Capitalizing this at five per cent. and making an addition for smaller concerns not included in the list, "the bad investments of the public, within three years, came fully up to $1,500,000,000 and are likely to exceed it."—"Matthew Marshall" in *New York Sun*, July 1, 1895. This list included no losses on real estate investments and none in industrial enterprises, except a few of the largest, whose shares were the subject of trading on the New York Stock Exchange.

payment for the crops of 1891 was made by the return of American securities instead of the shipment of gold. American exports of merchandise fell in the fiscal year 1893 to $831,030,785 and the balance of trade against the United States for the six months ending June 30, 1893, was $68,800,021. The national banks of the East, warned by the European crisis, began to scan their loans and strengthen their gold holdings.[1] The failures reported by Bradstreet's Commercial Agency in April, 1893, were 905, as compared with 703 in the same month of 1892, and the number increased to 969 in May as compared with 680 in May of the year before. The panic did not become acute, however, until the middle of May. The Chemical National Bank of Chicago, with a capital of $1,000,000, closed its doors on May 9th, and was followed two days later by the Columbia National Bank of Chicago, with a capital of an equal sum. These suspensions, accompanied by the collapse of private and State banks and business firms and corporations, paralyzed credit and brought the country to the verge of a crisis.

Upon these conditions of unstable equilibrium came the shock of the suspension of silver coinage in British India. There, as in other silver using countries, the fall in the gold price of silver had brought changes in values and difficulties of administration and exchange. The United States had been making efforts for seventeen years to avert the effects of the depreciation of silver by means of an international bimetallic union. Congress by a joint resolution of August 15, 1876, appointed a joint committee of eight members, known as the "Silver Commission," which submitted an elaborate report on March 2, 1877. The majority of this commission reported in favor of "the restoration of the

[1] Their gold holdings increased $22,000,000 during the year ending September 30, 1892, which, says Comptroller Hepburn, "coupled with the known fact that many State banks and trust companies have also fortified themselves with a gold reserve during the year, shows that the fear that we were drifting towards a silver basis was not confined to foreigners." This is dated December 5, 1892, six months before the crisis.

double standard and the unrestricted coinage of both metals."[1] The other three members did not favor free coinage by the United States without the concurrence of other nations. The United States took the initiative in proposing an international conference, which met in Paris on August 10, 1878, and the American delegates proposed an international agreement for the equal coinage of both metals. The majority of the delegates of the European states presented resolutions declaring "that the question of the restriction of the coinage of silver should equally be left to the discretion of each state or group of states," and that the differences of opinion which had developed "exclude the discussion of the adoption of a common ratio between the two metals."[2] The American delegates—Mr. R. E. Fenton, Mr. W. S. Groesbeck, General Francis A. Walker, and their secretary, Mr. S. Dana Horton,—filed a protest against this decision.

A second attempt to secure a bimetallic union was made in the summer of 1881 by the concurrent invitations of the American and French governments. Senator Magnin, the French Minister of Finance, presided at the opening of the conference and indicated a part of the reasons for its meeting by stating that the resolutions adopted by the majority of the European delegates in 1878 were adopted when the Dutch delegates were not present, the Italian delegates refused to be parties and the approval by other delegates was given only under reservations. The American and French delegates, through Mr. Evarts, lately Secretary of State of the United States, again urged the formation of a bimetallic agreement, and the delegates of the European states voted "that there is ground for believing that an understanding may be established between the states which have taken part in the conference; but that it is expedient to suspend its meetings." Upon their proposition, therefore, an adjourn-

[1] Reports of the Silver Commission of 1876, Sen. Rep. 703, 44th Cong., 2d. Sess., 126.

[2] International Monetary Conferrence held in Paris, in August, 1878, Sen. Ex. Doc. 58, 45th Cong., 3d Sess., 163.

ment was taken until April 12, 1882, but the conference was never reassembled.[1]

The last attempt to secure a bimetallic agreement was made at the suggestion of the United States in 1892, but the invitations were limited to the purpose of securing a larger use for silver. The British government was unwilling to enter a conference with the declared purpose of restoring the free coinage of both gold and silver and the form of the invitations was adapted by the United States to their position, in order to secure their participation in the conference. The delegates of the United States were Senator Allison of Iowa, Senator Jones of Nevada, Representative McCreary of Kentucky, Mr. Henry W. Cannon of New York, formerly Comptroller of the Currency, and Professor E. Benjamin Andrews, President of Brown University of Providence, Rhode Island. Mr. Terrell, the United States Minister at Brussels, also took part in the conference and Mr. Edward O. Leech, the Director of the Mint, was an advisory delegate. Several propositions for the purchase and coinage of silver on government account in limited quantities were submitted to the conference, but it was again found that an agreement could not be reached and an adjournment was taken on December 17, 1892, until May 30, 1893. The German delegates were unwilling to bind their government to the policy of a second meeting,[2] and the events of the winter were so little favorable to bimetallism that President Cleveland did not feel justified in seeking a reassembling of the conference.

These several efforts to restore bimetallic coinage hardly arrested for a moment the downward course of silver, and the government of British India felt that they could no longer await the distant possibilities of international action. The fall in the price of silver caused constantly increasing difficulties, because of the heavy interest charges payable in London and the diminishing value of the proceeds of taxa-

[1] Proceedings of the International Monetary Conference held in Paris in 1881 ; Washington, 1887 ; 506.

[2] International Monetary Conference, held at Brussels under the Act of August 5, 1892.—Sen. Ex. Doc. 82, 370.

tion when measured in gold. It was not merely a difficulty which weighed upon the local administration, but it affected every British officer in India who received his pay in silver rupees, originally worth about forty-eight cents, but which had been steadily declining in gold value. A remittance by bills of exchange on London to family or creditors at home meant a shrinkage of nearly fifty per cent. in the nominal value of the money received in India. These troubles led to the appointment of a special committee of able financiers by the Secretary of State for India on October 21, 1892, who submitted their report on May 31, 1893.

Rumors of the character of the report of the Indian Currency Committee began to circulate in London early in June, but their proposals still lacked the sanction of executive action. It was not until June 26, 1893, that it was officially announced that the Legislative Council of India had ordered, with the approval of the home government, the closing of the mints to the free coinage of silver on account of individuals. It was proposed at the same time to fix the exchange value of the rupee at one shilling, four pence, or the equivalent of about thirty-two cents in United States money. Such a policy had been recommended by the Committee and was supported by the experience of Holland and Austria-Hungary, which had been able by suspending the free coinage of silver to float a large mass of silver and paper currency far above the bullion value of the silver and not far below parity in gold.[1] The net imports of silver into India for the nineteen English official years ending March 31, 1893, were $704,040,907, or an annual average of $37,054,784, which had been much exceeded during the last eight years of the period. The market for nearly one-third of the annual production of the silver mines of the world was thus closed by the stroke of a pen in Downing Street.

The news of the action of the British government caused a profound sensation in the United States and increased the tendency to unreasoning panic. Secretary Carlisle had al-

[1] Report of Indian Currency Committee, Sec. 93–98.

ready, on June 22d, authorized the anticipation of the July interest on the four per cent. bonds and the Pacific Railroad six per cent. bonds, with a view to bringing the slender resources of the Treasury to the relief of the growing stringency in the money market. The Treasury was practically exhausted by the enormous purchases of bonds at a premium in the autumn of 1890 and by the abolition of the duty on sugar by the tariff act of that year, and the gold reserve was already below $100,000,000. The price of silver, which was 36 pence per ounce in London and 78 cents in New York on June 26th, tumbled to 30½ pence in London and 65 to 67 cents in New York on June 30th. The value of the bullion holdings of the government shrivelled by this change in four days by about $37,000,000, and it was evident that the United States could no longer afford to carry alone the burden of sustaining the price of silver.

President Cleveland made an earnest effort to secure the repeal of the Sherman law during the short session of the Fifty-second Congress, before taking office, as he had done in 1885 to secure the repeal of the Bland Silver Act, then in force. The House Committee on Coinage in the Fifty-second Congress had been constituted by Speaker Crisp with a majority in favor of free coinage and of continuing in force existing laws requiring Treasury purchases of silver. It was necessary, therefore, in order to bring before the House any measure repealing the Sherman law, to have it reported from another committee. Representative Andrew of Boston was one of the first to discover a way of doing this. He introduced, on December 12, 1892, a bill amending the national banking law, but containing a provision repealing the silver purchasing clause of the Act of 1890. This bill was referred under the rules to the Committee on Banking and came before the House on February 9th, by means of a special order reported by the Committee on Rules for its consideration. The order was not satisfactory in form to the advocates of repealing the Act of 1890, and its adoption, by a vote of 152 to 143, constituted their virtual defeat. The affirmative vote was given by 108 Democrats, 35 Republi-

cans, and 9 Populists and the negative vote by 105 Democrats and 38 Republicans. Several conferences were held with a view to a further effort to secure repeal or to secure a reduction of silver purchases, but no plan was framed which was acceptable to the Eastern Republicans, whose votes were necessary to make a majority for repeal. President Cleveland caused it to be understood, soon after his inauguration, that he would not summon Congress in extra session before September unless a serious crisis confronted the country. The crisis was invoked in the latter days of June, 1893, by the closing of the Indian mints and the effect upon the American currency. A meeting of the cabinet was held on June 30th, at which the increasing number of suspensions by the banks and the paralysis of business were fully discussed, and it was decided to issue a proclamation summoning Congress in extra session at noon on the 7th day of August.

The summons came none too soon and did little to stay the progress of the panic. Banking institutions, national, State, and private, were daily suspending, depositors were withdrawing their cash from the banks, and industrial enterprises were coming to a halt. Twenty-five national banks suspended in June,—a number never before exceeded in an entire year,—seventy-eight suspended in July, and thirty-eight in August.[1] The collapse of private and State banks was even more alarming. An average of about seventy suspensions per year up to the close of 1892 swelled to 415 during the first eight months of 1893, representing liabilities of $97,193,530. Banks all over the country began to refuse to pay checks except in certified or clearing-house checks, currency went to a premium, and many factories were obliged to shut down for lack of money to pay their employees. The refusal to cash checks in currency and the premium offered for it by New York brokers arrested deposits in the

[1] Eighty-four of the banks afterwards resumed business. The capital of sixty-seven national banks actually insolvent during the year ending October 31, 1893, was $11,035,000.

banks, but brought much that was in private hoards into the market.[1]

Some conception of the reduction in exchanges caused by the panic may be gathered from the shrinkage of the transactions of the New York Clearing House from $34,421,380,870 for the year ending October 1, 1893, to $24,230,145,368 for the year ending October 1, 1894. The comparison for the prosperous month of October, 1892, with the same month of 1893, showed a shrinkage in the clearing transactions of the leading cities of the United States from $5,501,901,592 to $4,043,510,662. The clearings throughout the leading cities of the country showed a shrinkage from $58,880,682,455 for the year ending September 30, 1893, which included a part of the period of panic, to $45,017,960,736 for the year ending September 30, 1894. The failures throughout the country increased from 10,270, with liabilities of $108,500,000, in 1892, to 15,560, with liabilities of $402,400,000, in 1894.

The shrinkage in money values was as marked as in the volume of exchanges. Securities which had been considered the safest ceased to pay dividends and fell rapidly in value in the hands of the holders. The Erie, the Philadelphia and Reading, the Atchison, Topeka and Santa Fe, and the Union Pacific were among the great railway systems, representing hundreds of millions of obligations, which passed into the hands of receivers. Railway earnings fell $147,390,077 during the year ending June 30, 1894, as compared with the previous year, or 12.07 per cent. of the gross earnings. Hundreds of millions of invested capital thus ceased to be productive, and those who had fancied themselves in the

[1] The surprising thing about this suspension of cash payments by some of the banks was that little public complaint was made about it. The business public seemed to recognize it as a necessary condition of the panic, although it is doubtful if it was necessary. Some of the banks continued to meet all demands for currency and nearly all paid small checks. It was estimated that $15,000,000 in currency was sold in New York during the crisis.—Alex. D. Noyes, *Political Science Quarterly*, IX., 29.

possession of an assured income from their stock holdings found their wealth turned to ashes in their hands. A crash in industrial stocks took place on May 5, 1893, but July 26th was one of the panic days on the stock exchanges. Rates for money in New York, which were normal in the morning, rose to 75 per cent. per annum before the close of business. The scarcity of money forced holders of securities to unload. Atchison general fours dropped from 71 to 66; New York, Lake Erie, and Western seconds fell from 59 to 53; Chicago gas went down from 50 to 43¾; and General Electric slumped from 47½ to 40½. The excitement in New York was so intense that it was proposed to close the Stock Exchange, but the proposition was rejected by the governors at their meeting the next day. An appeal was made to the foreign exchange houses for help and $10,000,000 in gold was engaged in London while exchange was quoted above the exporting point.

The heavy demands upon the national banks and the reduction of their coin and currency threatened early in the panic to carry their cash reserves below the limit required by law in the reserve cities. The reserves of the New York banks were close to the limit early in July and fell on August 5, $14,017,800 below it. The natural remedy for the scarcity of currency was the successful expedient of other years of panic,—the issue of clearing-house certificates. The first issues was made in Philadelphia on June 16th, but the New York banks promptly followed on June 21st, and those of Boston and Baltimore six days later. The largest amount outstanding at one time in New York was $38,280,000, from August 29th to September 6th; in Philadelphia, $10,965,000, on August 15th; in Boston, $11,445,000, from August 23d to September 1st; and in Baltimore, $1,475,000 from August 24th to September 9th. These issues, amounting with $987,000 at Pittsburg, to $63,152,000, are the only ones reported by the Comptroller of the Currency, but they only served as a lesson to the clearing houses of the country. Some form of certificate of this character was issued in nearly every considerable city

and served to greatly relieve the strain upon the ordinary circulation.

A more striking indication of the readiness of American bankers and business men to respond to the necessities of the moment was the issue of emergency paper for general circulation. The clearing-house certificates were employed only between the banks. The law imposing a ten per cent. tax upon the notes of State and private banks was supposed to stand across the path of any issues for general circulation, but the law received little attention when the absolute necessity of a circulating medium forced itself upon the country. Certificates and certified checks were issued in scores of communities where currency could not be had. They were usually guaranteed by the associated banks where there were such banks; they were issued by a single bank in even amounts where concerted action could not be obtained; and they were issued by railway companies and manufacturers where arrangements could not be made with the banks. In a few cases they were issued with the guarantee of the local authorities drawn upon some public fund. These certificates and checks proved very useful where currency was in demand for pay-rolls, were treated as cash by banks and merchants, and were promptly redeemed when the panic was over. [1]

The financial crisis of 1893 was a striking illustration of the truth that bank-note circulation plays but a trifling part, or none, in promoting crises. The national banks had been

[1] Representative John DeWitt Warner of New York, commenting upon the relations of these issues to the ten per cent. tax law, declared that "In this way, after the machinery so carefully adjusted by government had utterly failed to work, the business common sense of our people readjusted its finances; and in every part of the land business started up again, manufacture continued, the laborer received his hire, and the merchant disposed of his goods."—*Sound Currency*, Vol. II., No. 6, p. 8. These emergency issues were so entirely winked at by the government that the collections under the ten per cent. tax on bank circulation were returned by the Commissioner of Internal Revenue for the year ending June 30, 1894, as only two dollars and twenty-six cents.

contracting their secured circulation until it stood on June 1, 1893, at only $177,164,255. They had shared in the expansion of business, however, by the increase in their numbers and in their deposits. The number of national banks formed in 1890 was 307, with an aggregate capital of $36,250,000. The year 1891 showed organizations of 193 new banks, with capital of $20,700,000; 1892 showed organizations of 163 banks, with capital of $15,285,000; and 1893 had already shown 119 new organizations, with capital of $11,230,000, before the process of expansion was arrested, with the banking year only two-thirds complete. Even more remarkable was the extension of banking on deposits instead of on the capital and surplus of the banks. Bank capital increased seventy per cent. from 1870 to 1892, and the number of banks more than doubled, but individual deposits were multiplied three and one half times and rose from one-third of total liabilities in 1870 to more than one-half in 1892.

One of the defects of the operation of the national banking law, revealed anew by the crisis, was the use made of the provisions permitting the deposit in reserve cities of three-fifths of the cash reserve of the country banks and permitting the reserve banks to pay interest on such deposits. The national banks of the country on May 4, 1893, showed $174,312,119 as due from reserve agents, $121,673,794 due from national banks, and $32,681,708 due from State banks. Many banks throughout the West were obliged to suspend, because their reserves were not within ready reach. Out of a total of one hundred and fifty-eight national banks which were forced to suspend payments during the year ending October 31, 1893, eighty-six were authorized to resume business within a short time, and not one of these was east of the Ohio or north of the Potomac. This is the best proof that these Western and Southern banks would have been able to maintain their solvency if their cash reserve had been in their own custody.[1] It was also a subject of

[1] This argument is intelligently worked out by Mr. Alexander D. Noyes, "The Banks and the Panic of 1893," in *Political Science*

criticism that the banks were forbidden to make new loans when their cash reserves fell below the fixed legal limits. The Comptroller was authorized to require a bank to make good its reserve, and failing this to appoint a receiver. This power was used with moderation by Comptroller Eckels and the banks of the reserve cities increased their liquid resources by their issues of clearing-house certificates.[1]

The meeting of Congress on August 7th found the Eastern members of both political parties so strongly impressed with the serious condition of the country that they were prepared to push the repeal of the silver purchase law by the most drastic measures and by a union of forces without regard to political divisions. The message of President Cleveland, transmitted to Congress on the day following their meeting, recommended, "the prompt repeal of the provisions of the Act passed July 14, 1890, authorizing the purchase of silver bullion, and that other legislative action may put beyond all doubt or mistake the intention and the ability of the government to fulfil its pecuniary obligations in money universally recognized by all civilized countries." An agreement was reached on August 10th, between the supporters and opponents of the President, that debate should begin the next day and that the vote on a repealing bill should be taken on August 28th. Mr. Wilson of West Virginia, the recognized leader of the Democratic majority of the House, introduced a repealing bill early the next morning. The silver men, in accordance with their pledges to their opponents, made no attempt to interpose dilatory tactics and the roll was called on the passage of the bill on the 28th of August.

The votes given upon this day showed the largest majority against the silver standard given for many years in the House of Representatives. The first vote was taken upon a motion of Representative Bland of Missouri, for the opening of the mints of the United States to the free coinage

Quarterly, IX., 12. It is not to be inferred that deposits in reserve cities should be cut off entirely, but simply that they should be confined within more prudent limits.

[1] Report on the Finances, 1893, 356.

of silver at the ratio of sixteen to one. The vote was 125 in the affirmative and 226 in the negative,—a majority of 101 against the proposition. The intense interest taken in the issue and the demand from the country that every member should be accounted for is indicated by the size of the vote, which included every living member of the House except two,—a sick member from New York who was paired in favor of repeal with a South Carolina silver member. The next vote was taken upon free coinage at the ratio of seventeen to one, which was rejected, 101 to 241. Free coinage at the ratio of eighteen to one was rejected, 103 to 240; free coinage at the ratio of nineteen to one was rejected, 104 to 238; free coinage at the ratio of twenty to one was rejected, 122 to 222. The next motion of Mr. Bland's was to revive the Act of February 28, 1878, requiring the monthly purchase of not less than $2,000,000 worth of silver bullion and its coinage into standard silver dollars. The silver men rallied their greatest strength upon this proposition, which they represented as a compromise, but Mr. Bland's motion was rejected, 136 to 213. The roll was then called upon the repealing bill of Mr. Wilson and it was passed, 239 to 109,—a clear majority of 130 votes. The affirmative vote was cast by 138 Democrats and 101 Republicans; the negative vote was cast by 73 Democrats, 25 Republicans, and 11 Populists and Independents.

The indications of favorable action in the Senate, where the supporters of silver were strongest, were greatly strengthened when the Committee on Finance voted, on August 18th, to report a repealing bill, similar in its effects to the bill which was before the House, but containing some declaratory matter in favor of maintaining the parity of gold and silver. A careful canvass, during the progress of the debate, revealed the conversion to the repeal side of enough administration Democrats and moderate Republicans to make a majority of eleven for repeal. The existence of this majority seemed for a time, however, to be of little avail against the cumbersome rules of the Senate. The silver Senators, by persistent dilatory tactics, brought the Senate

at least twice close to the verge of surrender to their wishes. The last and most serious occasion was after the failure of the attempt to tire out the silver leaders by a night session. The Senate went into continuous session on the evening of October 11th, but the Populist Senator, Allen of Nebraska, held the floor continuously for fifteen hours, and the attempt to maintain a quorum of repeal members broke down at half-past one o'clock on the morning of October 13th. Senator Gorman of Maryland, who had never expressed any confidence of getting a vote on repeal, was one of the promoters of the compromise then proposed, and every Democratic Senator but four signed an agreement to support it. The President refused to countenance compromise in a statement given out on Sunday night, October 22d, and the renewed firmness of the friends of repeal forced the silver men three days later to lay down their arms and admit that they could not postpone indefinitely a vote on the bill. The repeal bill passed the Senate on October 30th, by a vote of 43 to 32, with five pairs; two days later, on November 1st, the Senate amendments to the form of the bill were concurred in by the House, and the bill was approved by the President.[1]

The acute stage of the crisis was over before the approval of the silver repeal bill by the President, but the expected revival of activity did not follow on the heels of repeal. Confidence in American credit abroad had been too severely shaken and the unfavorable conditions created by the Sherman law were still felt with too much force for business to resume at once its wonted activity. The history of former financial crises was repeated in the accumulation of idle capital in the banks in the form of deposits, the swelling of the cash reserves, and the reduction of commercial loans.

[1] The writer by a rather curious coincidence, predicted in the *Journal of Commerce and Commercial Bulletin* on July 6th, and in the *Springfield Republican* on July 10, 1893, the exact date on which the repeal bill would become law. "The Sherman law cannot be repealed before November 1st," was the language used in the *Republican*, and the course of events under the rules of the two houses of Congress was outlined almost exactly as they afterwards occurred.

The following table shows the state of the loans, the specie reserve, and the individual deposits of the national banks at various dates before the crisis and during the period of depression which followed, according to the reports to the Comptroller of the Currency :

DATE.	LOANS AND DISCOUNTS.	SPECIE RESERVE.	INDIVIDUAL DEPOSITS.
May 4, 1893	$2,161,401,858	$207,222,141	$1,749,930,817
July 12, 1893	2,020,483,671	186,761,173	1,556,761,230
October 3, 1893	1,843,634,167	224,703,860	1,451,124,330
December 19, 1893	1,871,574,769	251,253,648	1,539,399,795
February 28, 1894	1,872,402,605	256,166,585	1,586,800,444
May 4, 1894	1,926,686,824	259,941,923	1,670,958,769
July 18, 1894	1,944,441,315	250,670,652	1,677,801,200
October 2, 1894	2,007,122,191	237,250,654	1,728,418,819
December 19, 1894	1,991,913,123	218,041,222	1,695,489,346
March 5, 1895	1,965,375,368	220,931,641	1,667,843,286
May 7, 1895	1,989,411,201	218,646,599	1,690,961,299
July 11, 1895	2,016,639,535	214,427,194	1,736,022,006
September 28, 1895	2,059,408,402	196,237,311	1,701,653,521

These figures show the gradual reduction and slow recovery of the loans and discounts, which afford the best measure of business activity. The individual deposits suffered at first, but began to recover, as timid capital was withdrawn from active investment. The accumulations of idle capital were largest in New York and other cities of the East, because less capital had been destroyed there by bad investments and less was needed to support consumption which was no longer supplied by current earnings. The partial restoration of confidence in the banks, unaccompanied by sufficient general confidence to promote new business enterprises, transformed the scarcity of currency which prevailed at the acute state of the panic into plethora, which there was no means of relieving except by the export of gold. Gold for export had been furnished up to 1892 by the banks of New York city, and the banks and the government mutually paid gold and gold certificates in the settlement of their balances at the New York Clearing House. The settlement of these balances in gold was practically sus-

pended by the Treasury in the summer of 1892. The banks were obliged to withhold gold from their customers for the payment of custom duties and to send them to the Treasury for gold for export.

The combined effects of the loss of gold income, the reduction of receipts, the plethora of government paper currency, and the continued withdrawal of foreign capital was to compel four issues of bonds, aggregating $262,315,400 in principal and $293,000,000 in net proceeds to the Treasury, during 1894, 1895, and 1896. The most potent cause of these losses was the withdrawal of foreign capital, but this withdrawal was itself stimulated by the accumulation of idle currency, and the distrust of the financial policy of the United States which was invoked by the reduction of the gold reserve. The operation of the legal tender currency and of the Act of 1878, forbidding its cancellation when redeemed, was to expose the Treasury to persistent raids for gold, against which it had no means of protection through the interest rate, the charging of a premium, or the control of the foreign exchanges. The very gold paid into the Treasury for bonds sold to replenish the reserve, was obtained in large measure by the presentation of legal tender notes at the New York sub-Treasury for redemption.

The bids for the first issue of $50,000,000 in five per cent. ten year bonds were opened on February 1, 1894, and the reserve was raised on February 28th, to $106,527,068. Gold exports from the United States set in heavily again in April, 1894, and were not arrested until the beginning of the outward movement of the crops in August. The net exports of gold from the United States, after deducting imports, were $9,402,110 in April, $23,124,058 in May, $22,376,872 in June, $12,823,572 in July, and $1,935,303 in August, 1894, when the tide turned slightly in the other direction. The respite was but a short one and bids for another block of $50,000,000 in five per cent. ten year bonds were opened November 24, 1894.[1] The reserve was restored from $58,-

[1] The net proceeds of the first loan were $58,660,917, and of the second $58,538,500.—*Finance Report*, 1894, LXIX-LXX.

875,317 on September 29th, to $106,821,428 on December 10th; but the demand for the redemption of notes in gold during the next two months surpassed all previous experience and carried the reserve down to $44,705,967 on January 31, 1895. The redemptions of November were $7,799,747 and those of December $31,907,221. There was a slackening of the pressure during the early days of January, but it set in again with renewed violence during the last ten days of the month and drove the Treasury to the verge of the suspension of gold payments. The single day of January 25, 1895, showed redemptions of $7,156,046, and the evening of Saturday, February 2d, arrived with only $9,700,000 in gold coin available in the New York sub-Treasury. Even this was obtained by trenching upon the fund held for the redemption of gold certificates. Panic was seizing the business community and a single New York bank reported to Assistant Secretary Curtis that on January 30th they received over one hundred and fifty requests for gold coin, most of it evidently for hoarding.[1]

President Cleveland recommended the retirement of the legal tender notes and the substitution of a banking currency in his annual message to Congress in December, but the House of Representatives on January 9, 1895, refused to consider the bill reported in pursuance of this recommendation. The President on January 28th sent a special message to Congress, asking that he be given authority to retire the greenbacks and to issue bonds under more favorable conditions than those authorized by existing law. A bill to carry out his recommendations was introduced by Chairman

[1] Distrust of the security of United States notes or the pressure of the excessive paper currency produced a very different attitude on the part of the public towards the gold reserve after the passage of the Sherman law from that which prevailed before. The paper money presented to the Treasury for redemption in gold was $7,976,698 during the fiscal year 1879, the first six months after resumption, and declined in 1882 as low as $40,000. The largest redemptions between 1879 and 1891 were $6,863,699 in 1886. The redemptions in 1891 were $5,986,070; in 1892, $9,125,842; in 1893, $102,100,345; in 1894, $84,802,150; in 1895, $117,354,178; and in 1896, $158,655,956.

Springer of the Banking Committee and reported by him to the House two days later. The bill authorized the issue of three per cent. bonds, redeemable after ten days at the pleasure of the government; the cancellation of the greenbacks received in payment for the bonds, to the amount of new circulation issued; and the increase of national bank circulation to the par value of bonds deposited as security. This bill was defeated, on January 7th, by a vote of 135 to 162.

The eighth day of February, 1895, was marked by the delivery to Congress of a special message from President Cleveland, describing one of the most notable transactions of modern finance. The President announced the completion of a contract for the purchase by the government of 3,500,000 ounces of standard gold coin, by the delivery of about $62,400,000 in four per cent. coin bonds, redeemable after thirty years.[1] The purchasers of the bonds were Messrs. August Belmont and Co., on behalf of themselves, and Messrs. N. M. Rothschild and Sons, of London, and Messrs. J. P. Morgan and Co., on behalf of themselves and Messrs. J. S. Morgan and Co. of London. The contract was witnessed by Assistant Secretary William E. Curtis, who had much to do with bringing it to a successful completion, and by Mr. Francis Lynde Stetson of New York. There was an alternative clause, reserving to the Secretary of the Treasury the right, in case he should receive authority from Congress within ten days, to substitute three per cent. bonds specifically payable in gold coin for the coin bonds authorized by existing law. The effect of this substitution, if the gold bonds were accepted at par, as the contract provided, would have been, according to the message of the President, to save the United States in interest charges $539,159 per year, or $16,174,770 during the thirty years fixed as the term of the bonds. A bill to authorize this substitution of gold bonds was reported by Chairman Wilson of the Ways and

[1] The actual transactions under the contract were the delivery of $65,116,244 in gold for $62,315,400 in bonds.—*Finance Report*, 1895, LVI.

Means Committee of the House on February 13, 1895, but was defeated in the House the next day by a vote of 120 to 167, and the contract was left in force according to its original terms.

The peculiar feature of this contract for the exchange of bonds for gold lay in the provision that the purchasers of the bonds, "as far as lies in their power, will exert all financial influence and will make all legitimate efforts to protect the Treasury of the United States against the withdrawal of gold pending the complete performance of this contract." The fulfilment of this pledge was accomplished through the control over the foreign exchanges which was exercised by the firms which purchased the bonds. They brought into their syndicate the leading gold shipping houses, and foreign bills of exchange were placed upon the market for several months in just sufficient quantities to meet the current demand. The syndicate by this process created debts in Europe which it was necessary to cover at some time by the purchase of exchange or the shipment of gold. They guarded in a measure against possible losses by keeping the rate for the bills which they sold considerably above the gold shipping point. They thus, in effect, created a corner in foreign exchange and imposed the cost of their operations upon the purchasers of foreign bills. This method of controlling exchange operated with wonderful success all through the spring and up to the closing days of July. The tide of gold exports, which rose to $24,698,489 in the month of January, was turned into net imports by the operations of the syndicate in bringing gold from Europe. February showed net imports of $4,067,003; March, net imports of $4,120,290; April, net imports of $2,029,761; May, net imports of $3,271,193; and June, net imports of $1,963,750. The effect upon the treasury was equally striking. The redemptions of United States legal tender notes in gold, which had been $45,117,738 in January, were reduced to $5,560,952 in February, $1,089,085 in March, $1,017,571 in April, $1,166,472 in May, and $1,239,287 in June.

The essential purpose of the contract, in spite of criticisms

to which it was justly subject, was to afford a breathing spell to the country for the restoration of confidence in the monetary standard and in the business future. The period of business depression beginning in 1893 had lasted long enough to exhaust idle stocks of goods, to accumulate capital in the banks, and to prepare the business community for a new period of activity if confidence could be restored. Mr. J. Pierpont Morgan, the eminent financier who was the leading spirit in the arrangement, would probably have made no attempt to restore confidence and business activity by similar methods in the spring of 1893 or of 1894, but he counted upon the probabilities of success in such an undertaking in 1895, and events partially justified his judgment. The loans and discounts of the national banks of the City of New York increased from $332,069,999 on March 5, 1895, to $363,848,573 on September 28, 1895, while the loans and discounts of all the national banks of the country advanced in the same interval from $1,965,375,368 to $2,059,408,402. The imports for the calendar year 1895 were $801,663,490, an increase of $125,000,000 over 1894, and only $39,000,000 less than in the prosperous year 1892. Receipts for postage, an unfailing index of business conditions, increased in every quarter of 1895 over the corresponding quarter of 1894, and reached for the concluding quarter of the year a total of $20,517,014, the largest volume of business ever recorded.

The essential defects of the policy of the syndicate contract were its failure to diminish the redundant volume of currency, the stimulus thus afforded to imports over exports, and the artificial nature of the attempt to corner the exchange market. This attempt practically broke down towards the close of July. A leading coffee firm which had payments to make in Europe found that they could be made cheaper by the shipment of gold drawn from the Treasury than by the purchase of exchange at the rates fixed by the syndicate. One of the syndicate firms was also compelled to ship gold withdrawn from the Treasury, in order to cover the bills of exchange which they had sold. The syndicate had been released from a part of the obligation to bring half the gold

in payment for the bonds from abroad, and had completed their deliveries under the contract on June 24, 1895. Members of the syndicate still held considerable quantities of gold, and the first exports were made up by voluntary deposits of this gold in the Treasury, amounting up to September 11, 1895, to $16,127,432. These deposits several times restored the reserve to $100,000,000, when it was on the point of falling below that amount, but the reserve slowly travelled downward from $107,512,362 at the end of June to $92,943,179 at the end of October.

The loss of control over the exchange market practically terminated the efforts of the syndicate to maintain the reserve, in spite of their voluntary gold deposits. The gold obtained for shipment continued to be drawn almost exclusively from the Treasury, the net exports were $13,468,188 in November and $14,170,899 in December, and the gold reserve fell to $63,262,268 on December 31, 1895. President Cleveland in the meantime delivered to Congress on December 3d, his annual message, laying special stress upon the importance of retiring, by means of a bond issue, the legal tender notes, which were presented over and over again to the Treasury for redemption and were required by the Act of May 31, 1878, to be "re-issued and paid out again and kept in circulation." Congress gave no indication of compliance with this recommendation, and the raid upon the gold reserve increased in intensity after the delivery of the special message of the President upon the encroachments of Great Britain upon the Venezuelan boundary. The possibility of war between Great Britain and the United States led English investors to unload American securities, caused large withdrawals of gold from the Treasury for export, and brought the country to the verge of the suspension of gold payments. The President, on December 20th, called the attention of Congress in a special message to the serious financial condition of the country and urged that they should not take a recess for the holidays without taking some step for the protection of the public credit. An effort was made by Congress to pass some legislation, but it was not satis-

factory at any time to the administration, because provision was not made for the issue of bonds specifically payable in gold nor for the retirement of legal tender notes. It soon appeared that the Senate and House could not agree upon any measure between themselves, and the President and Secretary of the Treasury determined upon another issue of bonds under the existing law.

A public call for subscriptions to $100,000,000 of four per cent. coin bonds, dated February 1, 1895, and payable at the pleasure of the United States after thirty years, was issued by Secretary Carlisle on January 5, 1896. There was some doubt at first among financiers whether the subscriptions from responsible holders of gold would be sufficient to permanently restore the gold reserve. Mr. J. Pierpont Morgan had been organizing a syndicate, in the hope of making a contract with the government similar to that of 1895, and the fact that he intended to obtain gold for the execution of his part of the contract from outside the Treasury gave the plan, in the opinion of many financiers, an advantage over a popular loan. The response to the call of Secretary Carlisle, however, when the bids were opened on February 5th, was such as to dissipate such fears and to materially strengthen the public credit. The number of subscriptions of an apparently *bona fide* character was four thousand six hundred and forty, and the amount was $568,269,850. A syndicate headed by Mr. Morgan subscribed for the entire amount at 110.6877. It was found that there were subscriptions for $66,788,650 at higher figures, so that Mr. Morgan's syndicate were allotted only the remainder of the $100,000,000. Subsequent defaults on the part of some of the subscribers raised Mr. Morgan's allotment to about $38,000,000 and made the net proceeds of the loan about $111,250,000. The gold reserve of the Treasury was rapidly increased by the deposit of gold in payment for the bonds and rose on March 17, 1896, to $127,862,644. The loan appeared to afford some of the advantages in restoring business confidence afforded by the syndicate contract of 1895. Business showed increased activity, and net exports of gold fell off until revived by agi-

tation regarding the maintenance of the metallic standard. This outward movement was checked by the banks and exchange houses and the reserve again increased during the autumn of 1896.

The crisis in Australia in 1893 was one of those peculiar to new countries. The future had been too rapidly discounted, speculation in land had been carried beyond the possibility of the immediate development of the country and an enormous debt had been created for public works. Competition in banking had been carried to such an extreme that nearly every little community supported branches of all the leading banks, and obtained excessive loans on property which could not be converted into quick assets. Not content with loaning their own funds in this way, the Australian banks established agencies all over the United Kingdom, with some local solicitor or stock broker as agent, and paid commissions to obtain deposits. When the crisis broke out in January 1893, the British deposits in the Australian banks were about one-third of the total deposits of £153,000,000. Foreign money had poured into Australia under the conviction among British investors that investments among those of their own blood were safer than among the South American republics or the decrepit nations of Eastern and Southern Europe.

This easy accession of riches came to be counted by the Australians as part and parcel of their own accumulations. A circular issued on behalf of a public loan for the colony of Victoria in 1892 counted up the wealth of the people at £440,000,000 or at the rate of nearly £400 for each of the 1,140,000 inhabitants. This valuation was more than fifty per cent. greater per capita than that of Great Britain, after centuries of accumulation, but it was made up by appraising unsettled lands at £2 per acre which could not be sold today for £1 and by a similar process of inflation of bank credits and personal wealth.[1] The City of Melbourne, with its population of 500,000, was extended on the maps of the land speculators to limits which would have afforded ample

[1] Raffalovich, *Le Marché Financier en 1893-94*, 305.

accommodations for a city with twice the population of London. The feeling of affluence which such figures caused had encouraged the creation of a public debt of about £34 per head, almost exactly twice the enormous public debt of the United Kingdom.

Stubborn facts did not bear out these inflated valuations and the adoption of the protective policy in a country where manufacturing had hardly been born added to the fetters upon consumption, whatever might be expected from its final results in developing native industries. The revision of the tariff in 1892 was made with the avowed purpose of obtaining additional revenue to meet the charges on the foreign debt, but its results were to reduce the customs receipts for the fiscal year 1893 by about £250,000. Warnings against the land boom were given several years before the crisis of 1893, but many of the banks had plunged in so deep and tied up so large a proportion of their assets in landed security that they dared not take a backward step. Advances once made on land were increased in proportion to the fictitious value reached by speculation, the discount on the added loan was deducted from the new advance to the borrower, and this actual increase in the risk of the bank was carried to the fictitious account of earnings and profit.[1]

A large proportion of the British deposits which had been secured through agents were owned in Scotland and fell due on the half yearly term days. Every half year represented a critical point in Australian banking and none looked more critical as it drew near than the Whitsunday term of 1893. The danger was so threatening, that some of the banks would be compelled to suspend, by demands from Scotland, that Australian depositors began to withdraw their accounts and thus brought about the collapse which might otherwise have been again postponed. The signal of the actual crash came on January 29th, when the Federal Bank of Melbourne failed. It was a new institution, with limited capital, long looked upon with distrust by the older banks, and a strong

[1] Sydney J. Murray, London *Bankers' Magazine*, Oct., 1895, LX., 479.

effort was made to create the impression that the failure had simply cleared the air and left the older institutions stronger than before. The public refused to accept this view of the case and gradually began to withdraw their deposits from all the banks. Notices of withdrawal poured in from Great Britain, and on April 4th the Commercial Bank of Australasia closed its doors, with deposits of £12,044,000. The English and Australian Bank, with deposits of £5,795,000 and ninety-one branches, stopped payment on April 12th, and the London Chartered Bank, with deposits of £6,588,000 and fifty-eight branches, closed its doors during the next week. The government proclaimed a five days' holiday early in May, in the hope that public excitement would subside while the banks were enjoying a breathing spell. But banks continued to go down, and when the last failure occurred on May 17th, fourteen institutions had failed with aggregate deposits of £85,000,000, including £26,000,000 owed in Great Britain.

Twelve banks, with deposits before the panic of £71,000,000, succeeded in weathering the storm and did much to restore confidence by their refusal to avail themselves of some of the devices of the weaker institutions. The government of New South Wales made bank-notes a legal tender for six months, which enabled the banks, without increasing circulation more than ten per cent., to come to the relief of commerce by liberal loans. The surplus of loanable capital in Europe brought some relief, when the substantial character of the assets of the stronger banks became known, and plans of reconstruction were soon set in motion.[1]

[1] London *Bankers' Magazine*, May, 1895, LIX., 715.

CHAPTER XXV.

THE CRISIS OF 1907.

Industrial Progress after 1893 in the United States and Europe—Economic Waste of the Wars in South Africa and the East—Great Output of Corporation Securities—Effect of the Increase in Gold Production—Bank Troubles in Germany—Weaknesses of the American Financial Organization—The Stock Market Reactions of 1901 and 1903—"The Silent Panic" of March, 1907—The Bank Failures of October—Suspension of Currency Payments and Issue of Clearing-House Certificates—Treasury Measures of Relief—Conditions at the close of 1908.

RECOVERY from the crisis of 1893 was delayed in the United States by the uncertainty attending the Presidential election of 1896. The declaration of the regular Democratic convention of that year in favor of the free coinage of silver caused such anxiety among business men, who desired to adhere to the gold standard, that practically no new enterprises were undertaken or projected until, a few weeks before the election, it became certain that the Republican candidates, who stood upon a platform in favor of the existing gold standard, would be elected.

After the inauguration of President McKinley on March 4, 1897, confidence was gradually restored, and presently began a revival of business activity. Exports of merchandise, which amounted in the fiscal year 1896 to $882,606,938, rose in 1898 to $1,231,482,330; in 1900 to $1,394,483,082; and finally, in 1906, after only moderate changes in intervening years, to $1,743,864,500, and in 1907 to $1,880,851,078. Imports of merchandise, which in 1896 were only $779,724,674, did not feel the impulse of reviving prosperity until the

movement of expansion was well advanced, but in 1900 the amount was $849,941,184; in 1903, $1,025,719,237; and finally in 1906, $1,226,562,446; and in 1907, $1,434,421,425. The ratio of imports per capita, which in 1898 had been as low as $8.05, rose for 1907 to more than double this ratio, or $16.54. Internal trade also increased in great proportions and banking operations expanded in harmony with the expansion of business. Clearings at New York, which were $29,350,894,000 in 1896, and $51,964,588,000 in 1900, increased in 1907 to $95,315,421,000 while for the country at large they increased from $51,935,651,000 in 1896 and $81,582,450,000 in 1900, to $154,662,515,000 in 1907. The volume of money in circulation rose from $1,506,434,966 in 1896 to $2,055,150,998 in 1900, and $2,772,956,455 in 1907. Individual deposits in national banks increased from $1,668,413,507 in 1896 to $2,458,092,737 in 1900, and $4,322,880,141 in 1907.

In other commercial countries also progress was rapid during the ten years ending with 1907, but was checked in several cases by war and other special circumstances. Among the most conspicuous of these influences were the effects of the war in South Africa upon Great Britain, from 1898 to 1902, and the effects of the war between Russia and Japan, in 1904–1905. The war in South Africa cost the British Government nearly $800,000,000 and resulted in loans to the amount of nearly $600,000,000.[1] The effect was severely felt in the money market in restricting the supply of capital for other classes of investments. Especially was the issue of large quantities of new securities felt upon the price of British consols. Quotations had been as high in 1896 as 114¼. The reduction of the interest rate from 2¾ to 2½ per cent. took effect in 1903 and had some influence in depressing prices, but the influences which were most potent in carrying down consols to a minimum price of 91 in 1901, and 80¾ in the autumn of 1907, were the great demands for capital and the increase in the amount of consols on the market.

[1] *Vide Bulletin de Statistique*, April, 1902, LI., 485.

The war between Russia and Japan over the control of Manchuria began in February, 1904, and hostilities practically ceased in June, 1905. The attack of the Japanese upon the Russians was followed by a serious break in the markets of Paris and Berlin, but partial recovery soon took place. The estimated cost of the war to Russia was about $840,000,000, but this did not represent the disbursements after the peace.[1] The cost to Japan, up to the close of 1906, was officially calculated at about $1,000,000,000.[2] The war between Spain and the United States in 1898, though of minor importance, cost the United States about $165,000,000,[3] and for a time seriously impaired Spanish credit. Thus, in these several conflicts in arms were expended not less than $2,800,000,000, making demands upon the savings of the world equal to more than the usual output of all classes of securities for an entire year.

Coincident with this great destruction of wealth in war was an unprecedented demand for capital for new industrial enterprises. As usual in periods of expanding trade, the resources applied to these enterprises were converted in excessive amounts into fixed forms and the supply of circulating capital became deficient. A period of redundant capital followed the prostration of 1893. During this period, when interest rates in Europe sunk to 2 or 3 per cent. and important government loans were refunded at low rates, refunding operations constituted a large proportion of the issues of new securities. When rates for money rose, however, and capital began to become scarce, about 1897, refunding operations substantially ceased. They were resumed to some extent in 1902 and 1903, chiefly in the case of important government loans, but were again brought substantially to a halt in the next two years. In the table given below, based upon the figures of the *Moniteur des Intérêts Matériels*, total issues of all classes of securities are given, with con-

[1] Raffalovich, *Marché Financier en 1905-06*, 450.

[2] Report on the War Finance, 1906, 12.

[3] Report of the Treasurer of the United States, Finance Report, 1898, 7.

version or refunding issues. followed for each year by the net new demands for capital obtained by deducting conversions from total issues :

ISSUES OF NEW SECURITIES, 1896–1906.

Year.	Total issues.	Conversions.	Net new demands for capital.
1896	$3,227,359,071	$1,465,451,600	$1,761,907,451
1897	1,852,173,846	132,182,873	1,719,991,013
1898	2,034,766,348	316,530,453	1,718,235,895
1899	2,175,823,434	120,873,970	2,054,949,464
1900	2,289,642,963	.....	2,289,642,953
1901	1,917,916,282	.....	1,917,916,282
1902	3,597,489,052	1,639,921,000	1,957,568,052
1903	3,534,248,906	1,687,729,387	1,846,519,519
1904	2,785,138,525	353,445,223	2,431,693,302
1905	3,688,124,622	323,487,879	3,36:,636,743
1906	5,126,000,000	2,001,000,000	3,125,000,000

These figures show that, while new demands for capital were comparatively uniform from 1896 down to 1903, they increased to an enormous extent during the next three years. Hence came the strain which was felt in the market for capital in Great Britain and Germany as well as in America. In the United States issues of the negotiable securities of corporations—stocks and bonds—multiplied much more rapidly than the total mass of tangible physical property, whose value was computed in 1904 at $107,104,211,917. This increase in security issues gave an appearance of fluidity to the capital of the country, which was in some respects deceptive. While securities are themselves readily negotiable under normal conditions, they represent fixed capital and not circulating capital. Stocks are the title to shares in permanent investments, like railways, factories, and buildings. Bonds usually represent the obligations which have been issued to acquire fixed capital and are secured by mortgages upon railway mileage, factories, and buildings. The conversion of circulating capital into these fixed forms proceeded at a remarkable rate after the recovery from indus-

trial depression about the year 1900. Careful calculations show the principal securities outstanding in the United States even in 1905 to have been about $35,000,000,000 par value. Among the chief items were the following:

PAR VALUE OF OUTSTANDING SECURITIES IN THE UNITED STATES, 1905.

Class of securities.	Par value.
Government debt	$ 3,265,000,000
Steam railways	12,600,000,000
Street railways	3,200,000,000
National banks	800,000,000
Other banks	650,000,000
Manufactures	6,800,000,000
Mining, oil, etc	3,300,000,000
Other classes	4,385,000,000
Total	$35,000,000,000

The amount of securities outstanding throughout the world as early as 1900 was estimated at about $110,000,000,000, or more than the entire wealth of the United States. Great Britain was credited with $26,400,000,000, or $616.97 per capita; France with $19,500,000,000, or $500.94 per capita; and Germany with $10,000,000,000, or $177.41 per capita.[1] To these amounts great additions were made during the following seven years. In Great Britain alone issues of new capital were estimated for the five years ending with 1904 at $3,454,978,975, but this included a considerable amount in foreign securities offered on the London market. In the United States calls for new company capital were computed for 1904, at $1,003,542,200; for 1905, $1,694,187,211; for 1906, $2,307,970,000; and for 1907, $1,459,325,000.[2] Into Russia was poured in a few years French capital to the amount of at least $200,000,000.

[1] For further details, *vide* article by the author, "The World's Wealth in Negotiable Securities," *Atlantic Monthly*, January, 1908, CI, 97.

[2] *New York Journal of Commerce*, January 2, 1908. *Annual Review*, second section, p. 10.

A great increase in the output of gold from the mines contributed its share for a dozen years to the rise of prices and the encouragement of speculation. The average annual production of gold for the twenty years ending with 1890 was $110,544,000. Then for the twelve years ending with 1902 came an annual average production of $221,635,000. The total production during these twelve years was $2,659,624,000, which was nearly 30 per cent. of the total production for the long span of four centuries ending with 1890.[1] The production of the next five years exceeded $1,850,000,000. Official estimates for these five years are as follows:

GOLD PRODUCTION OF THE WORLD.

1903–1907.

Year.	Value.
1903	$327,702,700
1904	347,087,300
1905	376,289,200
1906	400,342,100
1907	404,000,000
Total	$1,855,421,300

When this prodigious total for five years is added to the production of the previous twelve years, a total is obtained for seventeen years of $4,515,046,000. Thus, within less than twenty years, production reached an amount equivalent to more than half of the entire production of the preceding four centuries. Even these figures do not reveal the increase in the proportion available for money, which bore a much greater ratio to the pre-existing stock. The amount required for the arts made progress from year to year, but did not keep pace with the ratio of production. If in 1890 about $60,000,000 was absorbed throughout the world for industrial purposes and the arts, only about $50,000,000 of the annual product was left available for additions to the monetary stock; while in 1906, even with a consumption in

[1] *Vide* the figures in detail in the author's *Principles of Money and Banking*, i., 89.

the arts estimated at $121,601,200, the amount left available as money was about $279,000,000, or more than five times the average of the years ending with 1890.[1]

It would be natural, under any theory of money, that this great addition to the monetary stock should have some effect upon prices and the condition of credit. Fundamentally, it is the supply of other things than gold which determines the ability of a community to build railways, houses, and factories. It requires rails and steel frames and machinery and labor. But the fact that these can under normal conditions be obtained for gold obscures the importance of the part they play, until the community is brought face to face with scarcity of supply in relation to demand or with scarcity of consumable goods necessary to the ordinary processes of life. The influx of new gold into bank reserves tends, other things being equal, to stimulate speculation in both securities and goods, whence may occur a rise in prices. The fact that the problem remains essentially one of capital and credit rather than of the stock of gold was demonstrated, however, by the conditions of the crisis of 1907. In spite of the outpour of gold from the mines at a rate never equalled or approached in the history of the race, demand outran supply, the new gold did not offset the maladjustments of capital, and the money market found gold an unsatisfying aliment when what was required was more saved capital in forms adapted to the continuance of production.

The effect of the war in South Africa was to cause a check to commercial expansion in Europe, which reacted powerfully upon the markets of St. Petersburg, Berlin, and Brussels. In Russia, newly dowered with the gold standard

[1] The figures of the Mint Bureau as to the industrial consumption of gold differ widely for different years, the tendency in recent years being apparently to raise the amount. Thus, for the United States alone industrial consumption was put for 1898 at $13,565,879; for 1903 at $29,063,551; and for 1906 at $39,126,763. For the world the estimate for 1903 was only $76,350,600, while for 1906 it was $121,601,200.—*Finance Report*, 1907, 335.

by the skill of Count Witte and encouraged by the consequent influx of foreign capital, prices rose rapidly in 1898 and 1899. The far-sighted Minister of Finance gave a warning in vain, early in the latter year, to the bankers of St. Petersburg of the danger of locking up their resources in speculation.[1] The Bank of Russia was compelled to come to the rescue of the market, and on September 23, 1899, there was a crash in bank shares and industrial securities which carried them down by from 20 to 50 per cent.

The loss of capital in Russian enterprises had its reaction in Germany and Belgium, whence much of the resources for these enterprises had come. In Germany efforts to maintain high prices for iron and coal were made by the large syndicates by curtailing production, but they were only partially effective.[2] Banks which had tied up their capital in new industrial projects, especially electrical, found themselves unable to meet their obligations. Two mortgage banks failed in the autumn of 1900, because they had been speculating in real estate through subsidiary companies. The failures caused a panic in mortgage bonds, which was most acute in the case of two companies which had been gravely mismanaged—the Bank of Pomerania and the Mortgage Bank of Mechlenberg-Strelitz. Bonds of the former fell from 98¼ to 77, and of the latter from 100 to 49; but the discount banks came to their aid and they were saved from failure.[3]

On the heels of the mortgage bank failures came difficulties in two large institutions of a different character. One of these, the *Dresdner Creditanstalt*, was aided temporarily by other institutions, but eventually went into liquidation. The other, the Bank of Leipzig, founded in 1839, and having a capital of $12,000,000 and 12,000 depositors, went down at once. To a single industrial syndicate, the *Trebertrocknung Gesellschaft*, which produced and manipulated the securities

[1] Raffalovich, *Les Crises Commerciales et Financières depuis 1889*, 46.

[2] Lévy, *La Crise Industrielle*, 7.

[3] Raffalovich, *Le Marché Financier en 1901-02*, 66.

of fourteen affiliated companies, advances had been made under various accounts to the amount of $21,000,000. Inevitably the head of the *Leipziger Bank*, Herr Exner, was refused aid when he sought it at Berlin, in spite of the fact that its failure was sure to cause pressure upon other institutions.[1] A serious run followed upon the banks of Saxony, and some small institutions and many industrial companies went into liquidation. Much money was lost in tramways and other electrical enterprises. Of 443,550,000 marks ($106,000,000) in nominal capital for twenty-one companies, most of the shares being quoted far above par, there were losses in market quotations between January 1, 1899, and October 15, 1901, which amounted to 270,810,000 marks ($64,500,000), or 61 per cent. of the earlier quotations.[2] Gradually, however, liquidation ran its course and, with the help of the Imperial Bank, affairs returned to a normal condition early in 1902.

In the New York market several special causes of weakness supplemented the general causes,—excessive demands for capital and increase in gold production, which were stimulating speculation throughout the world. In America, more perhaps than anywhere else, the game of converting circulating capital into fixed forms went merrily on until the mercantile community woke up, in 1903, and again more emphatically in 1907, to the fact that there was no longer sufficient circulating capital to meet legitimate mercantile demands. Several special causes also, besides the newness of the country, contributed to make speculation in America more reckless than in other commercial countries. Among these factors were the concentration of idle money from the West and South in New York, at the seasons when it was not needed for moving the crops; the system of permitting reserve deposits by national banks in the banks of New York, Chicago, and St. Louis; the system of daily settlements on the New York Stock Exchange; the acceptance

[1] Raffalovich, *Le Marché Financier en 1901–02*, 48–53.

[2] *Ibidem*, 187.

of small cash margins for speculation from persons without financial responsibility; and the absence of any central banking control over the discount rate or the movement of gold.

The defects of the American currency system appear at their worst in periods of panic. The inelasticity of the bank-note currency, coupled with the provisions of law governing the reserve system, cause a strain against which neither the law nor the actual workings of the system afford any safeguard. From 1897 to 1907, a new element of weakness was injected into the situation by the great development of trust companies and State banks, without any proper correlation to the national banking system. These State institutions were not only not required to keep adequate reserves, but even the reserves required were permitted to be kept in bank-notes. Thus their deposit and credit operations were capable of expanding to enormous proportions without any definite relation to gold. And such an expansion actually occurred. Within seven years, from 1900 to 1907, total liabilities of State banking institutions and trust companies expanded by more than five thousand millions of dollars, while cash reserves expanded by only about $171,000,000, and national bank-note issues expanded by about $440,000,000. [1] As these bank-notes are secured by evidences of the public debt and not to any appreciable extent by gold reserves, it becomes apparent how one form of credit was built upon another, until the whole fabric became a house of cards which a zephyr might topple in ruins.

And to this fragile nature of the structure was added the fact that there was no refuge to which to look in time of

[1] *Vide* article by the present author on "The Lessons of the Panic," in *North American Review*, February, 1908, CLXXXVII., 180. The figures of State banking expansion were as follows:

GROWTH OF STATE BANKING.

	1900.	1907.
Number of institutions	9,519	13,317
Total resources	$5,841,658,820	$11,168,514,516
Cash reserves	$220,667,109	$391,847,497

storm, like the central banks of Europe, nor even a system of co-operation for guarding against a common danger. For the national banks, and a few of the State banks of New York city, there did indeed exist the Clearing-House Committee, and through its existence it became possible to take certain steps to avert shipwreck after the storm had reached its worst; but among the trust companies there was not even this slender bond of union. When the Clearing House required of New York city trust companies, early in 1903 that they should gradually accumulate ten per cent. in cash reserves against their demand deposits, they withdrew from the Clearing House rather than comply with the requirement[1]; and they made no move to secure reinstatement after the State Legislature in 1906 required of all such companies a reserve of fifteen per cent., of which only one third, however, need be in cash, and the other two-thirds might be respectively on deposit in other banking institutions or invested in prescribed securities. In this position of expansion and of isolation, therefore, stood the trust companies when the storm of 1907 broke, adding a portentous burden to the structure of credit sustained by the reserves of the national banks, upon which the entire structure thus ultimately rested.

The speculative field was greatly widened in the United States by the conversion of private manufacturing enterprises into stock companies and the grouping of these companies by consolidation into the dominating factors in their special industries. Large issues of securities for "good will" became necessary in order to acquire properties which might otherwise prove dangerous competitors, and the securities thus issued became the subject of active speculation for the rise on the stock exchanges. Already, as early as 1900, the number of industrial companies classified by the Census as "combinations" was 183, with capital actually issued to the amount of $3,085,200,868.[2] By the year 1904, the

[1] For details of this action, *vide New York Bankers' Magazine*, March, 1903, LXVI., 395.

[2] Final report of the Industrial Commission, XIX., 601.

amount of capital, including bonds, of 305 "industrial trusts," was estimated at $6,717,791,533.[1] Of these the greatest, and in many ways the typical consolidation was the United States Steel Corporation, formed in 1901 by the skill of Mr. J. Pierpont Morgan and representing capital and bond issues of nearly $1,400,000,000.

It was inevitable that the conspicuous creation of such a mass of new securities should draw into the maelstrom of stock exchange speculation a new public which had not been there before, that prices of securities should be forced by extravagant expectations to heights not warranted by real value, and that the market should react violently under every sudden gust of adverse influence. Such a reaction, of extreme violence, took place on the 9th of May, 1901, but it was due to a single episode in stock exchange speculation which had an economic character only in the sense that it was typical of many similar operations.[2] A struggle for control of the Northern Pacific Railway between the rival Morgan and Hill interests led to a rapid advance in the stock, and large "short" sales. The price, from 45¾ in September, 1900, advanced under steady buying to 149¾ on May 7, 1901, and on the next day to 180. Then the fact dawned upon the market that to two banking houses alone more stock had been sold than was available for delivery. The stock was "cornered."[3] A violent scramble to obtain the stock at almost any price to make deliveries caused other securities to be thrown on the market at a sacrifice, and advanced Northern Pacific to 1000. As compared with the prices of two days before, Atchison declined 44½ points; St. Paul, 53; New York Central, 25; Southern Pacific, 27¾; Amalgamated Copper, 33⅜. Money rose for a moment to 75 per cent. and President Tappen of the Gallatin Bank formed a

[1] John Moody, *The Truth about the Trusts*, 453–67.

[2] Mr. W. R. Lawson declares: "The colossal gambles which follow each other so rapidly in Wall Street and in the 'grain-pit' must shake confidence in the whole commercial system which permits them."—*American Industrial Problems*, 216.

[3] *New York Bankers' Magazine*, June, 1901, LXI., 918.

pool to lend $20,000,000 in the market. But it was a storm which soon passed. The buyers of the cornered stook accepted a moderate settlement by the "shorts," prices of securities promptly recovered, and the day after the panic money was loaned again as low as three per cent.

Speculation raged violently through the year 1902, but received a serious check in 1903. Prices of securities, both railway and industrial, had reached a height which repelled the public and imposed caution upon the banks. In February, 1903, began the decline in the price of pig iron, which was not checked until, from $24.25 per ton, it had fallen by successive stages to $15.50 in November.[1] Inevitably, the profits of the Steel Corporation declined, the price of its common stock fell from 39⅞ to 10, and of the preferred shares from 89¾ to 49¾, and in the autumn it became necessary to suspend the dividend on the common stock. Other industrial shares suffered in like proportion, and at times during the summer of 1903 grave results were feared for the entire economic order. The fall in quotations for iron was due in large measure to the restriction of orders from the railways, which were influenced primarily not by the decline of business, but by the scarcity of capital. When it was found that bonds issued at low rates for long terms of years could not be sold to advantage, recourse was had in many cases to notes, running for only two or three years, and paying over these short periods a much higher rate of interest than bonds.[2] A large volume of new securities, however, was still undistributed in the hands of rich men and powerful syndicates, and their heavy losses led to the designation of the long period of liquidation as "the rich man's panic." By skilful support of the market, so that the decline in prices was spread over several months, the worst consequences of the crisis were averted. The industrial depression proved only temporary, and by the summer of 1904 specula-

[1] Raffalovich, *Le Marché Financier en 1903–04*, 770.

[2] The sum of $129,600,000 was outstanding in railway notes in April, 1904, all issued since July 1, 1903, and paying from 5 to 6 per cent. interest.—*New York Evening Post*, April 23, 1904.

tion for the rise was resumed, and continued, with varying fortunes, until the latter part of 1906.

The year 1907 opened with a feeling among far-sighted bankers that speculation had been carried to extremes and that the only safe policy to pursue during the year was one of conservatism. These feelings were justified in March by a sudden collapse in the stock market—one of the most violent and, in some respects, most peculiar ever experienced. With little previous warning and without any notable event to bring about the crash, buying power suddenly disappeared from the market about the 13th of March and, after serious losses on that day, prices of leading stocks plunged downward many points on the 14th. Reading, which opened at 115, closed at 93; Amalgamated Copper fell from 98 to 80; American Smelting from 130¾ to 110, and Union Pacific from 145 to 120¼. Losses in many other cases were 20 per cent., and in some cases much more. Issues which were not of a first-class and well-known character became almost unsalable. Margins were wiped out, stocks were thrown over without regard to price, and heavy losses were suffered by wealthy men who had been induced to buy Union Pacific and other stocks in the expectation of an advance.[1] Paper profits shrivelled up more rapidly than in the great market breaks of "Black Friday" in 1869 or of the panic of 1873.

Events during the early summer were not encouraging to the market. The government prosecutions of corporations culminated in the fine of $29,240,000 imposed upon the Standard Oil Company of Indiana, upon 1462 counts, for rebating. The scarcity of capital was indicated by the complete failure of bond offerings by leading cities whose credit was above reproach. On August 9th, an offer by the city of Boston of $4,000,000 in 4 per cent. bonds brought bids for only $200,000. Three days later an offer by the city of New York of $15,000,000 4 per cents. brought bids of

[1] The shrinkage in 26 principal stocks alone, as compared with January 1, 1907, was computed at $971,500,000.—*New York Times*, March 15, 1907, 2.

only $2,713,815 at par.[1] The market recovered slowly and fitfully for a time, but suffered another downward movement in July and August, which carried prices in some cases below the level of March. Even after these events, however, although it was known that many individuals had suffered seriously and that loans had been called in large amounts by the banks, there was no important bank failure and no indication of serious disaster until the middle of October.

As in most panics, the crash came suddenly and at an unexpected moment. It began through the inability of certain persons who were speculating in United Copper stock to continue the operations for a rise which they had been carrying on. A fall in the price of copper metal adversely affected most of the copper securities. Under the misapprehension that a corner had been created in United Copper, quotations were run up in a few days from 37 to 60. All the stock bought by the bull pool, with a view of squeezing the bears, was delivered to them. The brokers found themselves unable to pay for it, the stock dropped on October 16th to 10, and it soon developed that a chain of banking institutions which was under the control of interests affiliated with the copper speculators had become deeply involved in their operations.[2] The result was that several banking institutions—the Mercantile National, the National Bank of North America, the New Amsterdam National Bank, and a few smaller ones—appealed to the Clearing-House Com-

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[1] *New York Bankers' Magazine*, September, 1907, LXXV., 436.

[2] Their methods were described thus: "Mr. Morse first, and then the Thomases and the Heinzes, had, after securing one bank, hypothecated the stock of that bank in various financial institutions, not only here but all over the country; had taken the money obtained by a loan on the stock of one bank to buy stock in another; had mortgaged that and bought into still another, and so on and on. . . . Furthermore, after securing control of banks, they had made loans to themselves for the flotation of promotion schemes and for the conduct of operations in the stock market."—Lawrence Dunning, "In the Days of the Panic," in *Van Norden Magazine*, December, 1907, II., 43.

mittee for aid in meeting their adverse balances at the Clearing House.

These conditions afforded an opportunity for the more conservative bankers who controlled the committee to accomplish what they had long desired—the elimination of a group of speculators from the banking world. The latter were notified that the resignations of officers and directors must be placed in the hands of the Clearing House Committee, and new officers appointed, if aid was to be extended. There was nothing to do but to comply with this demand. New officers were appointed, and the institutions were enabled to continue in business. On Monday night, October 21st, however, application for aid was made to the Clearing-House Committee by the Knickerbocker Trust Company, the third largest trust company in New York, and having deposits of nearly $60,000,000. It developed that its assets were to a considerable extent locked up in enterprises which could not be immediately liquidated, and that the president had been in close business relations with the controlling spirits in the National Bank of North America. The National Bank of Commerce, which attended to the clearings of the Knickerbocker Trust Company, finding a heavy unsettled balance against the company, refused to clear for it, and, after a run in which about $8,000,000 were paid out, the company, on October 22d, was compelled to suspend.

The next morning began a run upon the Trust Company of America, also having deposits of nearly $60,000,000, which proved to be the most serious run ever made upon a banking institution without destroying it. Within about two weeks the sum of $34,000,000 was paid in cash to depositors and in settlement of checks presented by other banking institutions. A run also began upon the Lincoln Trust Company, which reduced its deposits within a short time from about $20,000,000 to about $6,000,000. Inevitably, such events produced their reaction in the stock market. On Thursday afternoon, October 24th, business came almost to a standstill for lack of "call funds." President Thomas, of the Stock Exchange, hurried over to the office of Mr. J.

Pierpont Morgan, at about twenty minutes past two, with the news that the exchange must close if money was not forthcoming. Immediately, Mr. Morgan summoned the presidents of the big banks, and a fund of $25,000,000 was pledged to prevent disaster.

Already the cool, imperturbable financier who in 1895 had rescued the national treasury from suspension of gold payments, and who had made his name a household word by the formation of the United States Steel Corporation, was the recognized chieftain in the measures taken for averting disaster. Secretary Cortelyou, who had hurried to New York on the outbreak of the trouble, insisted that the financial interests should be united, and Mr. Morgan was the natural leader.[1] The Secretary of the Treasury promptly began large deposits of public funds in national banks, which enabled these banks to extend aid more generously to the threatened trust companies than would otherwise have been the case. Within a few days about $35,000,000 of public money was thus placed at the command of the market in New York, and considerable deposits were made at Chicago, Pittsburg, Cincinnati, and other central points. Net deposits of public funds held by national banks were ultimately increased from August 22d to December 3d by the sum of $79,834,689.

Under the strain of panic and the rigidity of the currency system, American banking broke down as it had done in 1857 and 1893. On Saturday, October 26th, the New York Clearing House Committee decided upon the issue of Clearing House certificates on the following Monday, and on the same day payment of checks in currency was generally suspended at the New York banks, and the same policy spread rapidly throughout the country. Clearing House certificates were issued directly by Clearing House committees in leading cities. The amounts issued at the principal cities were: New York, $100,000,000; Chicago, $37,505,000; Philadelphia, $13,295,000; Boston, $11,995,000; St. Louis, $12,-

[1] *Cf.* James Creelman, "Morgan the Magnificent," in *Pearson's Magazine*, February, 1908, XIX., 132.

965,000; Pittsburg, $5,855,000; Baltimore, $2,520,000; Milwaukee, $3,260,000. In Pittsburg and many other places, certificates or checks of small denominations were issued for general circulation. In Pittsburg the Stock Exchange also was closed, and in several Western States bank holidays were declared by the governors.

Notwithstanding these measures, alarm was not allayed and deposits in many banks and trust companies in New York continued to be withdrawn and hoarded in currency. The refusal of the banks to pay currency for checks caused a so-called "premium on currency," which rose as high as 4½ per cent., and was for a considerable time at 3 per cent. It was estimated that during October and November not much less than $25,000,000 in currency was sold by brokers in the financial district for checks.[1] Almost immediately, also, the New York banks began to feel the strain of the demand from their correspondents in the interior for the return of their reserve deposits. It was calculated that from the beginning of the panic to the close of December about $296,000,000 in currency was absorbed throughout the country, and that of this sum $218,000,000 passed through the New York banks.

Foreign exchange, fluctuating uncertainly at first because of the disposition in Europe to sell and remit American securities, turned sharply in favor of gold imports, and before the end of October engagements of over $24,000,000 were announced, which were swelled during November and December to an aggregate of more than $100,000,000.[2] While $94,000,000 of this gold was imported at New York,

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[1] A. D. Noyes, "The Financial Panic," in *The Forum*, Jan.–March, 1908, XXXIX., 302.

[2] The "premium on currency" made it profitable to import gold with exchange, in bank checks, far above the usual gold export point. While the normal gold import point is $4.83½, a premium of three cents on the dollar would permit importations without loss at a rate nearly 15 cents higher. The rate promptly advanced from $4.80 as high as $4.91, without checking gold imports. *Vide* Noyes, *The Forum*, Jan.–March, 1908, XXXIX., 308.

it was filtered through the New York banks so quickly into other parts of the country and into private hoards that the cash holdings of the national banks showed a loss of about $42,000,000, and State banks and trust companies showed a net loss of $19,000,000. The New York Clearing House banks shipped to the interior, from October 19 to December 7, $106,921,700 in excess of their receipts of currency during the same period.[1]

The heavy demands for gold converged chiefly upon London and caused the Bank of England to advance its discount rate three times within eight days—from 4½ to 5½ per cent. on October 31; to 6 per cent. on November 4, and to 7 per cent. on November 7, the highest rate fixed at the bank since 1873. In Germany the bank rate was advanced, first, on October 29, from 5½ per cent. to 6½ per cent., and on November 8 to 7½ per cent. The Bank of France, also, in spite of its immense holdings of gold, advanced its rate to 4 per cent. and extended relief to the London market by discounting a quantity of short-term treasury bills.

For a moment there was serious talk of a direct arrangement with the Bank of France to send gold to New York. It was recalled that the French bank had repeatedly aided the London market in emergencies, advancing in the Baring crisis of 1890 as much as $15,000,000 to the Bank of England. But the French bank, when approached in behalf of America, responded that, as there was no central institution in America like the Bank of England, it was disposed to deal only with the American Treasury. This the American government found inadmissible, and the project fell through; but the French bank parted with nearly $16,000,000 in American eagles upon the security of French commercial paper.[2]

While pressure upon the banks was at its maximum, exchange between different cities became difficult by reason of

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[1] Response of the Secretary of the Treasury to Senate Resolution of December 12, 1907, Senate Document 208, 60th Congress, 1st Session, 15.

[2] Yves Guyot, *La Crise Americaine*, in *Revue de Commerce de l'Industrie et de la Banque*, December 31, 1907.

the suspension of currency payments, and even the market for foreign exchange was temporarily blocked. Almost immediately, however, came into play the well-established economic principle that in such emergencies goods will be sacrificed to obtain money. The change in the character of the foreign trade of the country within the short period of five months presented an instructive revolution. A volume of imports which, in connection with foreign freights, increased the obligations of the country abroad, was suddenly turned into a balance of two to one in favor of exports by expediting the movement of the crops to Europe and by the curtailment of imports. The actual figures of the merchandise movement in these five months afford so striking an illustration of the tendencies of the market in time of panic that it is worth while to reproduce them :

Foreign trade movement, August 1, to December 31, 1907.

Month.	Imports of merchandise.	Exports of merchandise.	Excess of exports.
August	$ 125,806,043	$127,270,447	$1,464,404
September	106,365,180	135,318,342	28,953,162
October	111,912,621	180,256,085	68,343,464
November	110,942,916	204,474,217	93,531,301
December	92,288,771	207,179,436	114,890,665

Commercial conditions naturally reflected the strain in the money market. The crisis came too late in the year to pull down greatly the average of business movements, but in the last ten weeks of 1907 stock market prices fell sharply, clearings decreased, dividends were passed or reduced in many cases, and failures of large corporations and private firms became frequent. The shrinkage in the market value of stock exchange securities alone was estimated as high as $5,000,000,000. [1] Exchanges through the clearing houses

[1] *New York World*, December 29, 1907. Computed shrinkage on leading stocks as compared with December 31, 1906, was $2,609,552,825. Losses on bonds were estimated at $1,000,000,000 and on mining and unlisted stocks nearly $1,500,000,000.

showed a marked decline from the moment of the outbreak of the panic. By December the total for all cities reporting was the smallest of any month since September, 1904, and reflected a decline of 34 per cent. from December, 1906, 35 per cent. from December, 1905, and 26 per cent. from 1904. For the calendar year clearings at New York fell from $104-675,828.656 in 1906 to $87,182,168,381 in 1907.[1] The total of liabilities of insolvent enterprises was swelled by a few important suspensions, like those of the Knickerbocker Trust Company, the Pope Manufacturing Company, the Westinghouse Company, and the Arnold Print Works, until the total was three times that of 1906. About seventy banking institutions went down in the last three months of the year, but some were of small importance, and the number of national bank suspensions did not compare with the dismal record of 1893. Commercial failures of all classes for a series of years were as follows :

COMMERCIAL FAILURES, 1898–1907.

	No. in business.	No. failing.	Liabilities.	Per cent. of assets.
1898	1,093,000	11,638	$141,137,115	52.1
1899	1,125,000	9,634	119,730,593	51.8
1900	1,161,000	9,913	127,184,705	47.2
1901	1,207,898	10,657	129,978,838	46.9
1902	1,238,973	9,971	105,693,623	48.0
1903	1,273,000	29,768	154,277,093	54.5
1904	1,308,000	10,422	143,300,845	53.1
1905	1,352,947	9,970	121,770,668	53.5
1906	1,401,985	9,384	123,827,957	49.9
1907	1,447,680	10,285	371,342,692	72.5

For the first two months of 1908 the number of failures was 3013 and liabilities were $91,252,443,—an increase of 60 per cent. in number and about 200 per cent. in amount over 1907.

In order to demonstrate the determination of the government to exercise its powers fully to avert disaster, the Secretary of the Treasury took another important step. His

[1] *Bradstreet's*, January 4, 1908, XXXVI., 3.

deposits of public funds in the banks had been so large that it was not possible to continue further this form of relief to the market.[1] Accordingly, in order to draw out more funds from hoards, and make it possible to increase bank-note circulation, Secretary Cortelyou announced on Sunday, November 18, that he would receive subscriptions for $50,000,000 in two per cent. bonds for the construction of the Panama Canal and for $100,000,000 in three per cent. Treasury certificates running for one year. These measures were "influenced by the conclusion that it was advisable to take some strong and resolute step which would convince the public, both at home and abroad, that the government was thoroughly alive to the situation and determined to give its aid in every possible legal and proper form."[2]

It was not intended to accept bids for the full amount of these issues, if they were not found necessary, and eventually allotments were made of only $24,631,980 in the Panama bonds and $15,436,500 in the certificates of indebtedness. One of the purposes of the issues of new securities was to stimulate increase in bank-note circulation. As the result of this and other measures taken by Secretary Cortelyou, including more liberal rules for the acceptance of bonds to secure deposits, bank-note circulation advanced from $607,118,742 on October 15, 1907, to $631,344,943 on November 15, $676,914,235 on December 15, and $695,927,806 on January 18, 1908. These figures indicate that, in spite of the encouragement given by special measures, the inelastic char-

[1] In response to the criticism that he had no right to issue securities to obtain funds when he had large deposits in banks, the Secretary stated that "while the entire economic resources of the country were being devoted to the relief of the monetary stringency, not only on the part of domestic bankers, but by foreign-exchange houses and by the railways in the prompt movement of freight for export, it seemed inadvisable for the Secretary of the Treasury to take any step which would tend to counteract these efforts by withdrawing funds from the banks and thereby adding to the evils which it was his earnest desire to alleviate and bring to an end."—Senate Document 208, 60th Congress, 1st Session, 19.

[2] Senate Document 208, 60th Congress, 1st Session, 17.

acter of the bank-note system delayed the larger part of the increase until after the need for the new notes had ceased.

The effect of these various measures of relief was soon felt in the cessation of hoarding, the decline of the premium on currency, and the increase in the cash reserves of the New York Clearing House banks, which had been subjected to intense strain at the height of the panic. The deficit in reserves, which stood for the week ending November 2 at $38,838,825, had been further swelled on November 9 to $53,666,950; but the increase in the next week, following the action of the Treasury, was less than $500,000, and in the following weeks turned rapidly downward, until on December 28, 1907, the amount had been reduced to $20,170,350. The next few weeks saw the extinction of the deficit and the rapid accumulation of cash which usually follows a panic, until reserves stood on February 1, 1908, at $325,152,100 in amount and $40,526,725 in excess of legal requirements.

By the latter part of November the worst of the panic was over, so far as the money market was concerned. Payments in currency were gradually resumed, the Secretary of the Treasury was able to withdraw a certain amount of public moneys from the banks, and further engagements of gold were suspended. In Europe also conditions rapidly changed, so that the directors of the Bank of England during January reduced the discount rate by successive steps from seven per cent. to four per cent. The gold stock of the bank, which had fallen on November 7 to £27,725,225, rose by January 30, 1908, to £38,508,150. The Bank of Germany felt the benefit of the inflow of cash after the turn of the year and was able to reduce its discount rate, first from seven and a half per cent. to six and a half per cent., and on January 25, 1908, to six per cent. Within about two weeks—from December 31, 1907, to January 17, 1908—its metallic reserve increased by $32,000,000 and its notes outstanding decreased by $82,000,000.

The remainder of the year 1908 repeated the history of previous periods of liquidation. Money continued to accumulate in the banks, rates for loans on call fell to a minimum,

and speculation found encouragement in these conditions. After the election of William H. Taft as President in the United States securities advanced to prices only slightly below the maxima of 1906 and 1907. The maximum cash holdings of the New York Clearing House banks were attained on August 29, 1908, when the amount was $414,013,300, but an amount only about $30,000,000 less had been reached as early as the middle of May. Even the autumn crop movement failed to reduce materially this mass of gold and legal-tender notes, although the surplus above legal requirements was gradually reduced by the expansion of loans, from $66,098,800 on June 27th to $28,130,650 on November 28th. In Europe comparison of metallic reserves in November with those of the panic period showed increases at the Bank of England from £31,896,291 on November 13, 1907, to £35,719,196 ($174,100,000) on November 11, 1908; at the Bank of France (gold only) from 2,709,200,000 francs ($523,000,000) on November 21, 1907, to 3,354,300,000 francs ($647,400,000) on November 19, 1908; and at the Imperial Bank of Germany from 729,805,000 marks ($173,330,000) on November 14, 1907, to 1,093,094,000 marks ($259,600,000) on November 14, 1908. In all leading commercial countries developed a degree of reviving industrial activity which indicated that the effects of the crisis of 1907 were less far-reaching than previous ones, and tended to establish the principle that the capital invested in the machinery of the processes of current production had come to constitute a permanent fund of wealth, in comparison with which the amount affected or impaired by a single financial disturbance was becoming a steadily diminishing ratio.

CHAPTER XXVI.

THE FEDERAL RESERVE ACT.

Banking Policy of the Administration of President Wilson—Provision for Local Regional Banks Knit together by a Government Board—Rediscount of Local Paper by the Regional Banks—Issue of Notes by the Government on Application by the Banks—Gradual Retirement of the Two-Per-Cent. Bonds—Acceptances and Branch Banking Abroad.

A NEW turn was given to the discussion of currency legislation in the United States by the choice in the elections of 1912 of a Democratic President and a Congress Democratic in both branches. The necessity of currency reform was recognized in the Democratic national platform, adopted at Baltimore on July 2, 1912, but it was declared that "We oppose the so-called Aldrich bill or the establishment of a central bank." Upon the meeting of the short session of the 62d Congress, in December following the election, consideration of monetary legislation was begun by a subcommittee of the House Committee on Banking, headed by Representative Carter Glass of Virginia, who was already indicated as the Chairman of the Banking Committee in the new Congress which was to enter upon its functions on March 4, 1913.

It was generally recognized that, in view of the declaration of the successful party in its national platform, it was necessary to find a formula which would afford the advantages of a certain degree of concentration of reserves and greater

elasticity in note issue in some other way than through a single bank of issue. The solution arrived at, after several months of consideration in committees and discussion in Congress, was embodied in the law approved December 23, 1913, known as the Federal Reserve Act. The first draft of this measure was made public in June, but the bill was not taken up in the House until after consideration by a Democratic caucus, which made a number of important changes, and only passed the House on September 18th.

Vigorous protests against certain features of the measure were made by a convention of state bankers at Chicago held on August 22d and 23d, and by the regular annual convention of the American Bankers' Association at Boston in October. The result of these and other criticisms was a series of hearings given by the Senate Committee to representatives of the bankers' organizations and to students of the subject, which resulted in important changes by the Senate Committee and by a caucus of Democratic senators. The bill passed the Senate on December 18th. In the meantime repeated conferences between Senator Owen, Chairman of the Senate Committee, Chairman Glass of the House Committee, William G. McAdoo, Secretary of the Treasury, and others interested, had reconciled many differences between the two Houses, and the conference report was agreed to with such promptness that the bill was laid before President Wilson and signed by him two days before Christmas.

The Federal Reserve Act was designed to meet these three serious defects of the national banking system:

1. Lack of concentration of banking reserves.
2. Lack of elasticity in the system of note issue.
3. Absence of adequate facilities for expanding credit in periods of pressure through the system of rediscounts generally employed at European banks of issue.

The method of concentrating reserves adopted by the new law was the creation of several federal reserve banks, finally fixed in the act at not less than eight in number nor more than twelve. It was the earnest contention of those

who favored a higher degree of concentration that the number of reserve banks should be limited to four or five, and four was fixed at one time by majority vote of the Senate Committee on Banking. The original House bill provided for not less than twelve such districts, and this was the number finally established.

Wide powers were given by the new law to the federal reserve banks and to the Federal Reserve Board, which was constituted to bind the various parts of the new system together. It was provided that the capital of the federal reserve banks should be obtained by the subscription by each national bank of an amount equal to six per cent. of its combined capital and surplus. Of this amount three per cent. was to be paid up within a short time, leaving it to the discretion of the Federal Reserve Board to call for the remaining three per cent. at such later date as it might see fit. The amount of subscribed capital contemplated by this provision, if all the national banks entered the system, was about $107,000,000. These figures, however, were exclusive of the capital of the state banks and trust companies, which were authorized under certain conditions to become members of the new system.

In the case of national banks, something approaching compulsion was put upon them to enter promptly the new federal reserve system, by the provisions that their franchises as national banks should be forfeited unless they accepted the new act within one year after its passage ; that banks in reserve cities might, in the discretion of the Federal Reserve Board, be deprived of the rights of reserve agents within sixty days ; and that only banks members of the system could sell their two per cent. bonds to the federal reserve banks under the refunding provisions of the law. In the case of state banks and trust companies, no such compulsion was applied, but the privileges of rediscount and other advantages of the new system were extended to those of adequate capital whenever they were admitted to the new system.

The management of each federal reserve bank is vested

in a board of directors of nine members, of whom three are chosen directly by member banks from their own ranks, three are chosen by member banks from outsiders actively engaged in commerce, agriculture, or some other industrial pursuit, and three are appointed by the Federal Reserve Board. One of the latter is designated as chairman of the local board and has the custody of the commercial paper and other securities presented by the bank as the basis of note issue.

The federal reserve banks are authorized to receive deposits only from member banks and from the Federal Government, making them essentially bankers' banks and excluding them from competing with existing banks for the deposits of individuals and corporations. They are permitted, however, to enter the open market for the purpose of dealing in bills of exchange, cable transfers, and acceptances, and doing various other classes of business.

The district banks are knit together by the Federal Reserve Board, which was finally fixed at seven members, of whom the Secretary of the Treasury and the Comptroller of the Currency serve *ex officio*. The term of the five remaining members is fixed at ten years each, after the first appointments are so adjusted as to provide for the expiration of one of the regular terms at the end of each two years. Wide powers are given by the law to the Federal Reserve Board, both in prescribing regulations for the member banks of the system, in determining the rate of discount and the general policy of the federal reserve banks, and in combining the resources of these reserve banks through compulsory rediscounts and transfers of funds. Among the powers specifically granted to the Federal Reserve Board are the following:

To examine the books of each federal reserve bank and each member bank and to make a weekly statement of condition of each federal reserve bank and a consolidated statement for all such banks.

To permit (or, by the affirmative vote of at least five members of the Reserve Board, to require) federal reserve

banks to rediscount the discounted paper of other federal reserve banks, at rates of interest to be fixed by the Federal Reserve Board.

To suspend for not exceeding thirty days, and from time to time to renew such suspension for periods not exceeding fifteen days, any reserve requirement specified by the act.

To supervise the issue and retirement of federal reserve notes, provided for by the act.

To reclassify reserve and central reserve cities.

To suspend or remove any officer or director of any federal reserve bank, the cause of such removal to be communicated in writing to the removed officer or director.

To suspend the operations of any federal reserve bank, to take possession thereof, to administer the same during the period of suspension, and to liquidate or reorganize such bank.

To grant to national banks applying therefor, when not in contravention of state or local law, the right to act as trustee, executor, administrator, or registrar of stocks and bonds under such rules and regulations as the Federal Reserve Board may prescribe.

These specified powers are supplemented by many implied powers granted in other portions of the act, especially in regard to the issue of notes and control of reserves. Strong opposition was made to the exercise of such sweeping powers by a body deriving its authority purely from political sources and removed from direct contact with practical banking. This was met by the introduction of a provision, even before the bill was reported to the House, authorizing the directors of each federal reserve bank to appoint one member of a body to be called the Federal Advisory Council, which should meet in Washington to advise with the Federal Reserve Board, call for information, and make recommendations in regard to discount rates and the affairs of the new system.[1]

[1] This provision was stricken from the draft prepared by the conference of state bankers' associations at Chicago, but was embodied in the act as passed, and authority was given to the Advisory Council to meet anywhere and to act "by itself or through its officers."

The overshadowing feature of the new plan, which commended it to the banking community in spite of their objections to details, was the means afforded by the issue of notes for the granting of credit through the rediscount of commercial paper. It is this feature which permits the extension of credit upon sound business assets, without arbitrary limitations, and makes impossible a currency panic such as occurred in 1907, so long as the central banking system is solvent. Under the provisions of the law in this respect, good commercial paper may be presented for rediscount to a federal reserve bank by any of its member banks; and if there is a demand for currency, the rediscount may be made in the form of the notes of the federal reserve bank. A member bank is no longer restricted, therefore, in its power to extend accommodation to its clients by the limits of its own cash reserves, but may obtain currency from a federal reserve bank by the process of rediscount; and a federal reserve bank is restricted in its capacity to make rediscounts only by its command over a sufficient amount of gold to meet the somewhat flexible requirements of the law in respect to its own reserves.

The paper acceptable to the federal reserve banks for rediscount must conform to European banking experience in being of short maturities and based upon "actual commercial transactions." Such paper is defined to be "notes, drafts, and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been used, or are to be used, for such purposes, the Federal Reserve Board to have the right to determine or define the character of the paper thus eligible for discount, within the meaning of this act." Such paper must have a maturity at the time of discount of not more than ninety days, except that agricultural paper having a maturity not exceeding six months "may be discounted in an amount to be limited to a percentage of the capital of the federal reserve bank, to be ascertained and fixed by the Federal Reserve Board."

The provision is made in regard to note issue that

"federal reserve notes, to be issued at the direction of the Federal Reserve Board for the purpose of making advances to federal reserve banks through the federal reserve agents, as hereinafter set forth and for no other purpose, are hereby authorized." These notes are made, by the language of the law, "obligations of the United States," and are receivable by all national and member banks and federal reserve banks, and for all taxes, customs, and other public dues.

The language of this provision was severely assailed by eminent bankers as committing the government to the policy of fiat money, by the assumption and declaration that the notes were in the form of advances to the banks and were obligations of the United States. While this criticism was approved in form by nearly all economists of standing, it was considered by many to be of minor practical importance, because the notes are issued only upon the initiative of the banks, are secured by commercial assets, and are redeemed by the banks. Thus, the notes are in effect the notes of the banks, and their governmental character is one of form rather than of substance.[1]

Any federal reserve bank to which notes have been issued is required to pay "such rate of interest on said amount as may be established by the Federal Reserve Board." This provision was originally intended to permit a graduated tax upon the issue of notes, but was superseded to some extent by the provisions made in the final draft of the act for a definite ratio of reserve in gold or lawful money against notes. The reserve thus required is 40 per cent. of the amount of the notes outstanding; but it is provided that the ratio may fall below 40 per cent. when a graduated tax is paid at the rate of not more than one per cent. per annum upon the amount of the deficiency, until the ratio falls to 32½ per cent., when the tax is fixed at not less than 1½ per cent. per annum upon each 2½ per cent. or fraction thereof of the deficiency.

[1] See letter of the present writer in the New York *Evening Post*, October 20, 1913.

The notes of each reserve bank are required to bear a distinctive letter and serial number, to be assigned by the Federal Reserve Board. A reserve bank is prohibited from paying out the notes of other reserve banks, but must return them promptly for redemption, either to the issuing bank or to the Treasury of the United States. The Secretary of the Treasury is authorized to require the reserve banks to keep in the Treasury an amount of lawful money sufficient for such redemption, but such deposits shall be counted as a part of the required reserve of 40 per cent.

In addition to the notes thus provided for, which are intended to give greater elasticity to the currency system, the federal reserve banks are authorized to issue notes upon United States bonds in the manner provided by the national bank act, up to par of the bonds deposited. These notes are to be issued and redeemed under the same terms and conditions as national bank notes, except that the amount is not limited to the amount of the capital stock of the reserve bank by which they are issued. This provision is closely related to the disposition made of the two-per-cent. bonds deposited by the banks under the national banking law to secure circulation.

The problem of a proper disposition of the bonds was one of the most difficult before Congress and received its final solution only during the last few days before the enactment of the law. The act provides that national banks may continue to issue notes based upon bonds, for a period of twenty years, but that they may sell these bonds, to an amount not exceeding $25,000,000 per year, to the federal reserve banks, with the approval of the Federal Reserve Board. The bonds surrendered may be converted by the federal reserve banks into three-per-cent. bonds for thirty years or into Treasury notes bearing interest at 3 per cent. and running for one year. The object of the one-year notes is to afford to the federal reserve banks a form of assets more readily negotiable than long-term bonds, for the purpose of withdrawing money from the market or borrowing abroad. In this

manner a considerable portion of the bonds is likely to be gradually absorbed by the federal reserve banks, without loading down their own resources with too large a percentage of assets not readily convertible into cash without loss.

An important departure made in the new law from the provision of the plan of the National Monetary Commission was the taking away of reserve deposits from the national banks. The national banks were required within three years to gradually transfer to the federal reserve banks such portions of their reserves as they are not required to keep in their own vaults in cash. In order to avoid undue contraction during the period of transferring these funds, and to obviate the unnecessary calling of loans, the transition was not only spread over three years in time, but the percentage of reserves required was considerably reduced.

At the expiration of this period of three years, when the new system has come into full operation, member banks which are not in reserve cities or central reserve cities will be required to hold reserves against demand deposits of only 12 per cent., in lieu of 15 per cent. required under the national bank act. Of this amount 4 per cent. is required to be in cash in the vaults of the bank, 5 per cent. in the federal reserve bank of the district, and the remainder may be kept in either place at the option of the member bank. In the case of banks in reserve cities, reserves are reduced from 25 to 15 per cent., and must be kept to the amount of 5 per cent. in their own vaults, 6 per cent. in the federal reserve bank, and the remainder may be kept in either place. In the case of the central reserve cities,—New York, Chicago, and St. Louis,—the required reserve is reduced from 25 per cent. to 18 per cent., of which 6 per cent. is required to be held in the vaults of the bank, 7 per cent. in the federal reserve bank, and the remainder may be either in cash or in the federal reserve bank. A new provision of law permitted a classification of deposits and reduced the required reserve against time deposits, payable on notice of

thirty days or more, to 5 per cent. of the amount of such deposits, to be distributed in like proportion with the larger reserve required against demand deposits.

The system of the Federal Reserve Act bears a resemblance in some respects to the European systems of central banking, where the note-issuing institution holds the principal gold stock of the country and protects it by regulation of the rate of discount and by other measures tending to influence the supply of floating capital. The difference between the two systems consists primarily in splitting up the resources of American banks into twelve divisions, which are, however, more or less under common control through the Federal Reserve Board. How far this central control will in effect unify the local banks into a single powerful institution is left to the test of experience.

Several important modifications will take place in American banking methods after the new system produces its full effect. It is proposed by the new law to transfer the floating supply of capital to the commercial rather than the speculative field by excluding from the class of securities eligible to protect loans at federal reserve banks "notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the Government of the United States." Thus, after the new system becomes effective, the element of variability in the money market will be determined by the rates of discount for commercial paper rather than by the rates for call money loaned to brokers on stock-exchange securities.

The manner of making loans at American banks did not include, up to the time of the passage of the new law, the discounting of any considerable amounts of domestic bills of exchange or acceptances. The custom of manufacturers and wholesale dealers in commodities was to extend open credits to their clients, which were not represented by negotiable documents, and to make their borrowings from the banks upon paper bearing their own signature, known as "single-name" paper. The custom prevailing in Euro-

pean money markets, by which a draft or bill of exchange might be accepted and endorsed by a bank in which the drawee had a credit, and thereby made an instrument readily negotiable in the open market, had fallen out of use in the United States, and it had been held that a national bank had no authority under its charter to give acceptances. This disability was removed as to foreign bills by a provision of the new law that any member bank might "accept drafts or bills of exchange drawn upon it, and growing out of transactions involving the importation or exportation of goods having not more than six months sight to run." It was also provided that any federal reserve bank might discount acceptances based upon the importation or exportation of goods and which should have a maturity at time of discount of not more than three months, when endorsed by at least one member bank.

Another step designed to facilitate the extension of American banking abroad was the authority given to national banks having a capital of $1,000,000 or more, to establish branches in foreign countries or in dependencies of the United States; with the approval of the Federal Reserve Board, and under such regulations as it might prescribe. It was required that the application for authority to establish such branches should specify the amount of capital set aside for the conduct of foreign business. It was also provided that the federal reserve banks themselves might, with the consent of the Federal Reserve Board, open and maintain banking accounts in foreign countries, appoint correspondents, and establish foreign agencies, for the purpose of dealing in bills of exchange. The federal reserve banks were given authority also to deal in gold coin and bullion at home and abroad and to buy and sell at home and abroad bonds of the United States and bills, notes, revenue bonds, and warrants issued by state and municipal governments in the United States.

In the matter of the rate of discount, each federal reserve bank is permitted to establish its own rate from time to time

for each class of paper, subject to the review of the Federal Reserve Board. In this respect, the uniformity of rate required under the plan of the National Monetary Commission was abandoned, in view of the different types of credit and the varying rates for the use of capital prevailing in different parts of the country. The new measure, as it passed the House, prohibited the payment of interest by federal reserve banks upon deposits of member banks. This provision was dropped from the bill in the Senate, but in view of the general opposition among experts to the payment of interest except upon time deposits, it is not anticipated that such payments will be made under the authority of the Federal Reserve Board.

It is possible that interest will be paid upon government deposits, in accordance with the provisions of the law of 1907 providing for payment upon such deposits in national banks. It is required by the Federal Reserve Act that the moneys held in the general fund of the treasury, except the 5 per cent. fund for the redemption of national bank notes, and the funds provided in the new law itself for the redemption of federal reserve notes, may be deposited in federal reserve banks. This policy, however, is discretionary with the Secretary of the Treasury, who may, also, require the federal reserve banks to act as fiscal agents of the United States. It was objected to this provision in some quarters that the discretion given to the Secretary of the Treasury, to deposit government funds in such federal reserve banks as he saw fit, would enable him to defeat the policy of the Federal Reserve Board in the distribution of the gross assets of the federal reserve banks among themselves; but the view finally prevailed that, as the Secretary was the responsible custodian of the public funds, he should be allowed to keep them where he saw fit. Already, by the law of March 2, 1911, the old system of keeping the active funds of the Treasury entirely in its own vaults and branches was modified so as to permit the payment of public dues by individual checks when properly certified. The new federal reserve law provides that disbursements of public funds may

be made by means of checks drawn upon the federal reserve banks.

The work of dividing the country into districts under the provisions of the law was taken up promptly by the Organization Committee provided for in the Act, consisting of the Secretary of the Treasury, the Secretary of Agriculture, and ultimately of the Comptroller of the Currency, when the vacancy existing in this office was filled. This committee heard the applications of more than two hundred cities, through their clearing-house associations, Chambers of Commerce, and other representatives, in order to determine the city with which they preferred to be connected. Of these cities thirty-seven petitioned for designation as headquarters of a federal reserve bank. As the number of reserve banks was limited to a maximum of twelve, this number was ultimately provided for by the Organization Committee.

Strong arguments were presented to the committee in New York for the creation of a single district embracing the entire country northeast of the Potomac, including the New England States, New York, New Jersey, Pennsylvania, Delaware, and Maryland. Such a district would represent individual deposits of nearly $3,000,000,000, and a subscribed capital for the federal reserve bank of about $55,000,000. It was contended that a strong institution of this character was essential to influence the foreign exchanges and protect the national gold stock.[1] The Organization Committee failed to adopt this view and divided the northeast into four districts—one for New England; one for the State of New York; one for Eastern Pennsylvania, New Jersey, and Delaware; and one for Western Pennsylvania, Ohio, and a part of Kentucky. The headquarters of the remaining eight districts were fixed at Richmond, Atlanta, Dallas, Chicago, Minneapolis, St. Louis, Kansas City, and San Francisco. The following table shows the number of national banks in each district, according to the reports to the Comptroller of

[1] *Vide*, testimony of the present writer and others, New York *Evening Post*, January 5, 1914.

the Currency on March 4, 1914, with their capital and surplus funds, the amount of the subscription required to the capital of the federal reserve bank, and the gross national bank deposits by districts:[1]

BANKING CAPITAL OF RESERVE DISTRICTS

District No.	Reserve Cities	National banks March 4, 1914			
		Number of banks	Capital and surplus	6 per cent. subscription	All deposits
1	Boston	445	$165,409,043	$9,924,543	$631,356,974
2	New York	477	343,693,437	20,621,6 6	2,061,858,058
3	Philadelphia	757	208,135,631	12,488,138	937,181,166
4	Cleveland	767	200,123,060	12,007,384	851,157,633
5	Richmond	475	105,055,023	6,303,301	399,579,841
6	Atlanta	372	77,353,221	4,641,193	262,318,818
7	Chicago	952	207,997,941	12,479,876	1,265,208,464
8	St. Louis	458	83,179,348	4,990,761	378,858,307
9	Minneapolis	687	78,382,081	4,702,925	475,684,697
10	Kansas City, Mo.	836	93,166,912	5,590,015	521,318,350
11	Dallas	731	92,333,673	5,540,02[illegible]	307,130,732
12	San Francisco	514	130,422,921	7,825,375	573,243,051
	Total	7,471	$1,785,252,291	$107,115,137	$8,664,896,091

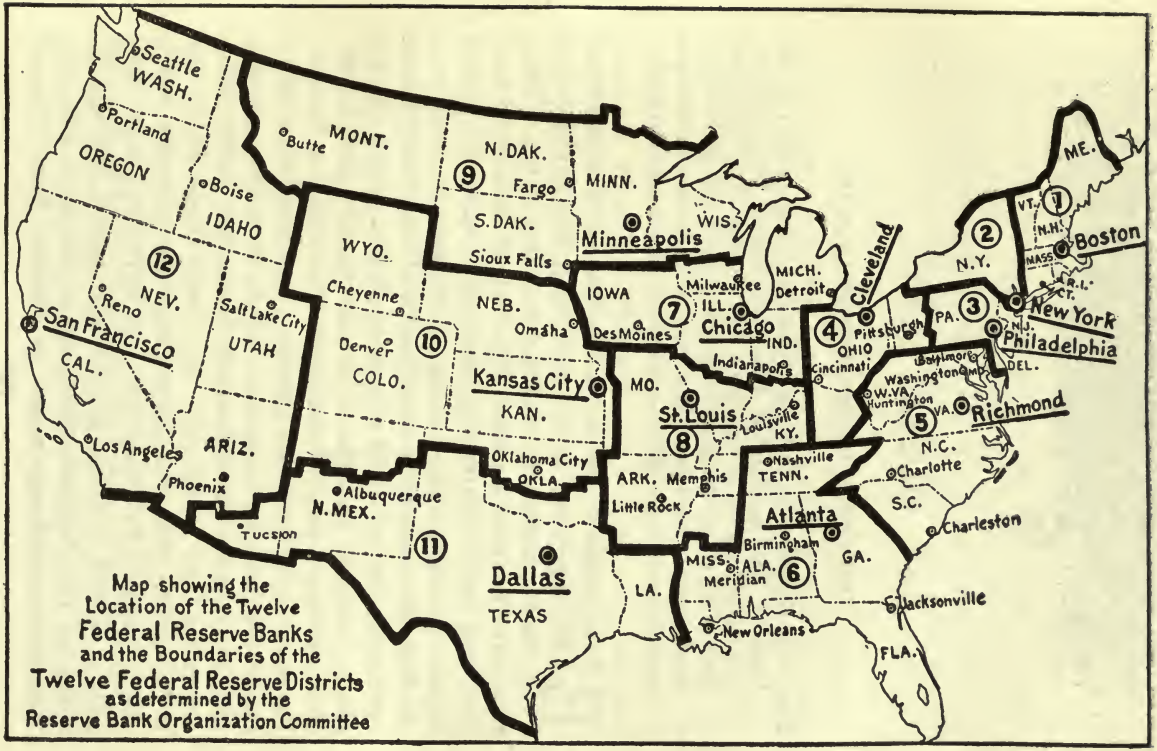
After considerable delay in the selection of members of the Federal Reserve Board, resulting in part from differences of opinion in the Senate, the board was constituted of the following members, who were sworn into office on August 10th:

Charles S. Hamlin of Boston, who was designated by the President as Governor of the Board, to serve two years; Paul M. Warburg of New York City, for four years; Frederick A. Delano of Chicago, for six years; W. P. G. Harding of Birmingham, Ala., for eight years; Prof. Adolph C. Miller of San Francisco, for ten years.

The Secretary of the Treasury and the Comptroller of the Currency, who became members of the board *ex-officio*, were, respectively, William G. McAdoo of New York City and John Skelton Williams of Richmond.

[1] The boundaries of the districts, with locations of the principal cities, are shown by the map on the next page, reprinted by special permission of the Secretary of the Treasury.

The new board at once undertook to grapple with the many problems arising in the American banking situation as a result of the general war in Europe, but acted for some time in an advisory capacity, without organizing the federal reserve banks. There was fear in some quarters that the calls upon the existing banks to pay in the capital of the new institutions, as required by the law, and to transfer to them certain percentages of their legal reserves, would be difficult to meet without seriously disturbing the financial situation.



Map showing the Location of the Twelve Federal Reserve Banks and the Boundaries of the Twelve Federal Reserve Districts as determined by the Reserve Bank Organization Committee

CHAPTER XXVII.

THE BANKS IN THE EUROPEAN WAR.

Paralyzing Effects of the Bursting of the War Cloud—Action of the Banks in Raising Discount Rates and Issuing Small Notes—The Moratorium in Europe and Latin America—Reaction of the War on the United States—Issues of Emergency Currency—Helpfulness of the Federal Reserve Board—Success of the Principle of Re-discount at the Banks of England, France, and Germany.

BY the events of the war in Europe, which broke out at the beginning of August, 1914, the banking and credit system was subjected to a test of fire. While the central banks of Germany, France, and Russia had been for a long time strengthening their gold reserves, in view of the uncertainties of the military and diplomatic situation in the Balkans, the suddenness with which the war finally broke out among the leading Powers resulted, for a moment, in the almost complete paralysis of the mechanism of exchange. Heavy selling of securities, especially those issued in America, began on the Vienna Stock Exchange soon after the assassination of the Austrian Archduke Francis Ferdinand, on June 28th, because the probable action of Austria in demanding reparation from Servia and the complications which this would involve with other Powers were more promptly known and appreciated in Vienna than at more remote points. The selling of such securities became more urgent after the delivery of the Austrian ultimatum to Servia on July 23d. The Vienna exchange closed on Monday, July 27th, and

other continental exchanges within a few days following. The London Stock Exchange was closed on July 31st, and New York promptly followed on the same day. Quotations of many securities had declined on the New York exchange about ten points within a week, and it was obvious that a further decline would occur, reaching the proportions of panic, if the exchange remained open to the avalanche of selling orders from Europe which were awaiting fulfilment on the morning of July 31st.

At the European banks of issue, as well as at the joint-stock banks, a condition approaching panic prevailed during the last week of July and the first week of August. Gold disappeared as if by magic from general circulation; the central banks practically ceased to pay out the yellow metal; and, in some cases, long lines of note-holders waited at the banks to demand gold for notes. The Bank of England on July 30th advanced its discount rate to 6 per cent.; the next day to 8 per cent.; and on August 1st to 10 per cent. The State Bank of Russia fixed its rate promptly on July 29th at 6 per cent. The Bank of France on August 1st adopted a rate of 7 per cent., the highest in its history since 1874; the Imperial Bank of Germany adopted a rate of 6 per cent., and the Bank of the Netherlands, 6 per cent. On Monday, August 3d, the Bank of Belgium fixed its rate at 7 per cent., and the Austro-Hungarian Bank adopted a rate of 8 per cent. On the next day, the Bank of Norway raised its rate to 6½ per cent., and the National Danish Bank to 7 per cent.

Another step, taken by nearly every European government, was the announcement of a moratorium for financial obligations.[1] This, in effect, gave the right to the drawee of bills

[1] The subject of giving a legal and uniform status to the effects of a moratorium was discussed at length at the two international conferences on bills of exchange and checks held at The Hague in 1910 and 1912, but the uniform law recommended at the second conference had not been generally adopted by the Powers before the outbreak of the war. *Vide* Bills of Exchange, Report of the American Delegation

of exchange to refuse payment on the date when bills were due, and relieved the holder from the obligation to make protest in order to hold the endorsers. In England, such a moratorium was declared for thirty days, beginning August 4th, but applying only to long bills of exchange. This was extended on August 31st for another month, or until October 4th, and later until November 4th. In France, a moratorium was decreed of wider application, including the suspension of payments on sight-drafts, which was interpreted to include deposits at the banks. In Germany, the action taken was more limited in character. It was provided that balances claimed by foreigners residing abroad, including bills of exchange, could not be sued for in the courts for three months, but exceptions might be granted by the Imperial Chancellor for entire nations as well as for individuals. In the case of balances due after July 31st, the courts were empowered to grant the debtor a respite of not more than three months, if it seemed justified by the circumstances, but delay in payment was not to be granted if it would impose too great a hardship on the creditor.[1] Russia declared a moratorium for two months from July 25th. Similar action was taken by Italy, Austria, Switzerland, Norway, Denmark, Turkey, Bulgaria, and Egypt.

The influence of the financial paralysis extended quickly to the Latin-American countries, which had been depending upon Europe for large loans. Brazil declared a bank holiday from August 4th to August 15th, and a moratorium of four months. The Argentine Republic declared a moratorium of thirty days on 80 per cent. of those credits which had expired or were about to expire and a suspension of gold withdrawals from the Conversion Fund. Similar action was taken in Peru, Ecuador, and Uruguay. In Canada, Parliament passed

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to the Conference of 1912, 63d Congress, 1st Session, Senate Document No. 162, pp. 293–95.

[1] New York *Evening Post*, September 8, 1914.

an act authorizing the government to declare a moratorium at any time during the war, but the right was not immediately exercised.

Almost inevitably, foreign exchange was thrown into the utmost confusion, not only between the countries at war, but with countries which were neutral. One of the reasons for this was the paralysis of ocean commerce, which made it practically impossible to ship gold without risk of capture. The last heavy gold shipment from New York, amounting to $10,600,000, made on July 28th, in partial settlement of the sales of American securities held abroad, was brought back to the United States by the German steamer, *Kronprinzessin Cecile*, without completing her voyage, because of the fear of capture by a British ship of war. For a few days, the rate of exchange in New York on London, which in normal times could not well go above $4.90 to the pound sterling, went above $5, and in some cases even to $6, and exchange could not be obtained in large amounts at any price.

Out of this welter of confusion and alarm, however, a comparative degree of order was soon developed by the energetic action of the banking authorities in England, France, the United States, and other countries. Severe as was the shock given by the outbreak of war to the system prevailing in Europe, of a central reservoir of gold and credit in the national bank, measures were promptly taken to restore workable conditions. In those countries where gold was a current medium of circulation,—conspicuously Great Britain and France,—authority was given to relieve the dearth of small money by issues of notes of low denominations. The Bank of France was authorized to increase the limit of its note issue from 6,800,000,000 francs ($1,300,000,000), where it was fixed by the law of 1906, to 12,000,000,000 francs ($2,300,000,000). At the same time, the minimum denomination of notes, which since the resumption of specie payments after the Franco-Prussian War had been fixed at 50

francs ($9.65), was reduced to 5 francs (96.5 cents) and note issues were authorized also for 20 francs ($3.86).

The Bank of England was authorized to suspend the Bank Act of 1844, in order to permit the issue of notes in excess of the legal limit, and new forms of notes for £1 and for 10 shillings were issued through the bank with the guarantee of the government.[1] In Switzerland also, the National Bank was authorized to reduce the minimum denomination of notes from 50 francs to 20 francs. In Holland, the minimum legal reserve of the Bank of the Netherlands was reduced from 40 per cent. to 20 per cent., and authority was given to employ 200,000,000 florins ($80,000,000) of the increase in the circulation which this permitted in making loans secured by bills and stocks. The bank was guaranteed against loss on such loans by a syndicate of the leading joint-stock banks.[2]

In Germany the Imperial Bank was authorized to suspend the redemption of its notes in gold and to issue notes without paying the 5 per cent. tax on excess issues which was the characteristic feature of the German bank-note system. The terms on which commercial bills might be accepted were made more liberal, and provision was made for the issue through special loan offices of a special form of paper, in denominations from 5 marks ($1.19) upward, for direct advances on merchandise and securities.[3] The power to issue small notes had already been availed of by the Imperial Bank of Germany and by the State Bank of Russia before the bursting of the war cloud. In Germany the bank had departed in 1906 from its original policy, of keeping the circu-

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[1] These issues, which were at first uncovered, reached on November 18, 1914, the sum of £33,890,384 ($165,215,600); but by that date were protected by a gold reserve of £12,500,000.—London *Statist*, November 21, 1914, lxxxii., 342.

[2] *Wall Street Journal*, August 3, 1914.

[3] Berlin correspondence, *London Times*, August 10, 1914.

lation saturated with gold coin, by authorizing the issue of notes for 50 marks ($11.96) and 20 marks ($4.76). The effort was at first made to limit these issues to 300,000,000 marks ($72,000,000), but early in 1912 this limit was passed, and within the next two years the issues of these two denominations rose to 681,822,000 marks, and their ratio to the total note circulation to about 26 per cent. The government of Russia reversed in 1904 its original policy of 1897, of saturating the circulation with gold coin, and adopted the policy of issuing small notes. The notes of the smallest denomination, 1 ruble (51½ cents) were retired; but notes for 3 rubles, 5 rubles, and 10 rubles ($5.15) were steadily pumped into the circulation until, as early as 1909, they constituted 46.5 per cent. of the total amount of paper outstanding. Within the next five years, the gold in the State Bank was increased by about $170,000,000, which nearly covered the amount of $209,430,000 representing the increase in outstanding note issues.

In the principal continental countries the scramble for gold had been going on actively all through the year 1913 and the early part of 1914. From a gold fund of $184,000,000 on December 31, 1912, the Imperial Bank of Germany increased its reserve to $336,000,000 on June 30, 1914. In addition, it gathered up for the Imperial government a sum of about $30,000,000, to be added to the war fund of the same amount stored in the vaults of the Juliusturm at Spandau. The gold holdings of the Bank of France on the eve of the war were $792,160,000 and those of the State Bank of Russia, $819,700,000. The entire gold production of the world during the eighteen months ended on June 30, 1914, was approximately $705,000,000. Of this amount about $200,000,000 was required for the arts and $150,000,000 went to British India. This left about $355,000,000 to be applied to monetary uses, and the whole of this amount was absorbed by the four central banks of Germany, France, Russia, and Austria-Hungary.

To these gold war funds the United States contributed up to the end of June, 1914, about $84,000,000 in the form of gold exports. When the war-clouds broke into storm, the effort in Europe to turn other forms of wealth into gold caused gold exports from New York in three weeks of $46,000,000, and sales of securities on the New York Stock Exchange which would have called for many millions more. The American market remained, up to the very eve of war, comparatively indifferent to the gathering storm-clouds in Europe. Fortunately, the finances of the United States were never in a stronger position to meet such a strain than in the closing days of July, 1914. Even on the stock market, liquidation had been so long going on and speculation had been so discouraging in its results, that there were only a few margined accounts to be thrown over and only moderate loans outstanding by the banks to commission-house brokers.

In respect to its gold equipment, the United States was stronger in some senses than even Russia and France, with the mountains of the yellow metal at the command of their central banks. The amount in gold certificates outstanding in the United States at near their maximum point, on April 30, 1914, was $1,158,997,000. These certificates represent simply deposits of gold on behalf of the owners in the custody of the government and are only a part, although a large part, of the gold resources of the country. The Treasury could afford to look on with comparative indifference while certificates were turned into coin and the coin went abroad; for neither of these operations affected directly the legal-tender reserve in gold, fixed by the gold standard law of 1900 at $150,000,000, nor did they affect directly the "free gold" in the Treasury cash, which stood on July 31st at a point above $130,000,000.

When it became apparent, however, that the demands of Europe for gold might be almost limitless, if she could throw upon the New York market the great mass of American

securities in which she had invested, prompt action was taken by the banking interests of New York and by the government to meet the situation. First, on Friday morning, July 31st, came the closing of the Stock Exchange; at a meeting of the New York Clearing House Committee on Sunday, August 2d, it was decided to issue Clearing House certificates for use between the banks in settling clearing-house balances; and on Saturday, August 1st, the Hon. William G. McAdoo, Secretary of the Treasury, arrived in New York and entered into conferences with the banking interests, with the result that the Treasury arranged for the prompt issue of emergency bank-notes to enable the banks to substitute notes for gold certificates in the circulation, and thereby husband their gold and build up their reserves. These reserves had fallen from $466,577,000 for the week of July 25th, to $444,434,000 on August 1st, and fell still further, under the pressure of gold exports, to $382,732,000 on August 15th. After that date, however, began a recovery, stimulated by the steps taken to increase the supply of currency and protect the national stock of gold.

It was the facilities created by the Aldrich-Vreeland law of 1908 which afforded an adequate supply of currency to the banks, guarded against the fear of monetary stringency, and put it in the power of the banks to husband their gold resources. The power to issue currency expired under the act itself on June 30, 1914, but this period was extended by the Federal Reserve Act to June 30, 1915. Currency had already been printed in considerable amounts and deposited in the sub-treasuries, to be issued if called for. As a result of this precaution, the Treasury was able to issue to the national banks of New York City alone, within the first six days of August, $38,780,000 in new notes, and these amounts were rapidly increased, until the amount thus issued had risen on August 27th to $103,309,260, in addition to a nearly equal amount to national banks in other places.

In the meantime, action was taken by the government to

remove some of the burdens imposed upon the issue of this currency under the law of 1908 and the amendments of 1913. The tax on new issues, fixed by the act of 1908 at the annual rate of 5 per cent. for the first three months, was reduced by the Federal Reserve Act to 3 per cent., and the additional tax accruing after three months was reduced from 1 per cent. to one-half of 1 per cent. for each additional month. These rates of taxation were not changed in the law which was passed by both houses of Congress during the first three days of August and was approved by the President on August 4, 1914.

The original law required, however, that a bank must have a bond-secured circulation of not less than 40 per cent. of its capital stock, in order to obtain new circulation; that the total circulation of any bank, including that secured by bonds, should not at any time exceed the amount of its unimpaired capital and surplus; and that the total amount of circulation issued under the provisions of the law should not exceed $500,000,000. All these requirements were placed by the act of August 4, 1914, in the discretion of the Secretary of the Treasury, to suspend, if he saw fit, provided that the total circulation of any bank should not exceed 125 per cent. of its unimpaired capital and surplus. The amount of the redemption fund to be kept in the Treasury, which was fixed by the law of 1908 at 10 per cent., was placed by the new law in the discretion of the Secretary of the Treasury, provided that it should not be less than 5 per cent. of the notes outstanding. These changes greatly diminished the burden imposed upon the banks in the issue of additional notes and raised the limit of possible issues to approximately $1,400,000,000, which was the difference between the maximum limit of circulation fixed by the new law and the amount of national bank-notes already outstanding.

The banks, by the aid of this additional circulation, were enabled to employ bank notes in meeting obligations to the public, to retain gold and gold certificates in their reserves,

and to refrain from calling loans to stock-brokers and other borrowers in a manner which would have caused difficulties and perhaps numerous failures, in view of the fact that the open market for the sale of securities had disappeared with the closing of the Stock Exchange and that such sales could be made only at low and uncertain prices. Some further changes in the law of 1908 were proposed later in the session of Congress, but were not considered so urgent as those embodied in the act of August 4th, and did not receive immediate consideration.

For the purpose of terminating the deadlock in foreign exchange, several measures were perfected, some being put into operation within a few days after the outbreak of war and others not until the middle of September. It was announced on Thursday, August 6th, that the government of France had deposited with the Paris office of J. P. Morgan & Company, a sum of about $6,000,000, which was subject to drafts by the French Ambassador in Washington. By means of checks drawn upon this fund, but delivered to J. P. Morgan & Company in New York, the French government would be able to purchase supplies in the United States, and the drafts would release an equal amount of money in Paris, which could be applied to obligations of American bankers and importers there. These deposits by the French government were afterwards considerably increased. A move in the same direction was announced by the Bank of England on August 11th, by which the Canadian Treasury Department was made a branch of the bank and custodian of the gold to be received from New York. By this arrangement the gold held on the American side of the Atlantic could be counted as a part of the reserve of the Bank of England against its note issues and deposit liabilities in England.

These measures were only preliminary, however, to the settlement of the serious difficulties arising from the large indebtedness of the United States to Europe, and specially to England. The suspension of the outward movement of

wheat and cotton cut off the supply of bills of exchange usually available in the Autumn, and left no means of remittance except the shipment of gold. This the New York. banks were unwilling to part with, in view of their reduced reserves, and for a time something like a deadlock existed in the exchange market, with rates for bills on London at 7 or 8 cents to the pound sterling above the usual gold shipping point. In meeting this situation the Federal Reserve Board, constituted by the law of December 23, 1913, rendered its first conspicuous service by assuming leadership in unifying the banking resources of the country. Although the Board was vested with only moral influence before the opening of the federal reserve banks on November 16th, it was recognized at once as a central authority to which banking and commercial interests could look in forming plans for relief.

It was upon the banks of New York that the chief pressure fell during the early weeks of the war, before the appointment of the Federal Reserve Board. Their task was rendered heavier by the fact that the municipal government of New York had incurred temporary indebtedness abroad to the amount of about $83,000,000 by the issue of notes maturing at various dates from September, 1914, to January, 1915. It was felt among New York bankers that the credit of the city would be seriously impaired if these notes were not met at maturity; and of their own volition, largely, they made up a pool to take new notes from the city, paying 6 per cent. and to find the gold or the exchange to meet the obligation abroad as it matured. When the question arose of meeting other foreign obligations, however, the aid of the Federal Reserve Board was invoked and an appeal was made to the banks in the 52 reserve cities of the country to contribute their share to a common fund in gold or exchange. Through these general contributions the pressure upon the banks of New York was distributed over a wider area and rendered less acute than in previous crises, The gold which

was thus made available for exchange was delivered to the Bank of England, which accepted delivery at its branch in Ottawa with the Canadian Treasury. On the two operations on the New York City debt and the general gold pool, with some few independent transactions, the amount of gold shipped to Canada, down to November 10, 1914, was $73,318,000.[1] These operations were so effective in restoring confidence that of $100,000,000 subscribed to the gold pool, only $25,000,000 was actually called, and a part of this was repaid to the subscribers during the closing days of November.

The most disturbing factor in the exchange situation, however, as well as in the field of domestic production, was the temporary cessation of exports of raw cotton,—the product upon which large sections of the South relied almost entirely for their subsistence. In forming a banking pool to make loans upon cotton, the lead was taken by Mr. Festus J. Wade, the St. Louis banker, but ultimately the approval of the Federal Reserve Board was sought and a sub-committee of the board was appointed to aid in the administration of the lending fund of $135,000,000, which it was planned to raise. About the middle of October relief was afforded to the cotton producers by the announcement that Great Britain would not treat cotton as contraband of war and would not, therefore, interfere with its shipment to manufacturing countries. During late October and early November another factor in diminishing the need for shipping gold abroad was the appearance in the American market of large orders for shoes, automobiles, and other supplies from the Powers of Europe.

Under these favoring influences exchange on London, which had remained considerably above the gold shipping points for several weeks after the formation of the general gold pool, fell before the close of October to normal rates in

[1] *Wall Street Journal*, November 10, 1914.

time of peace. Currency, in the meantime had begun to flow back to New York from the interior, until by October 24th the average reserves of the Clearing House banks stood at $441,882,000, or nearly the amount on August 1st, and $8,460,650 above legal requirements. The gain in cash would have been much larger if the New York banks had not begun to apply their surplus funds to the retirement of emergency bank-notes, which had become subject in most cases to the tax of 3½ per cent. imposed by the law after they had been in circulation for three months. The cancellations of note issues by the national banks of New York City alone reached $100,224,390 up to December 3d; but the net decrease was less for the country, because Southern banks gradually increased their issues in connection with the movement of the cotton crop. The maximum of emergency issues, however, which stood on October 23, 1914, at $368,616,990, declined on December 3d to about $242,000,000. The redundancy of currency and the accumulation of idle capital in the meantime caused a reduction in the rate for "call money" in New York to 5½ per cent. by the middle of November, while the rate for commercial paper tended to sag below 6 per cent.[1] At the beginning of December it was announced also that all the Clearing House loan certificates issued to New York banks, which reached an aggregate of $124,695,000, had been retired.

One of the most notable monetary lessons of the crisis was the success of the re-discount policy of the Bank of England in protecting British credit and maintaining the reputation of London as the clearing house of the world. At the outbreak of the panic the Bank of England was poorly equipped with gold in comparison with the Continental banks, relying, as usual, upon the ability of the London market to draw gold from other countries through the foreign bills accepted by London banks. The Bank of England had

[1] *Wall Street Journal*, November 12, 1914.

not been a party to any considerable extent to this class of business, and for a few days the fact that the joint-stock banks were unable to collect the obligations due to them from abroad threatened a breakdown, which would have greatly impaired, if not destroyed, the prestige of London as a financial centre.

The question arose, also, which had arisen in previous crises, whether the banking reserve of the Bank of England would be adequate to meet the increased demands upon it for discounts. There was grave danger that the mere suspension of the bank act, which had saved the situation in the domestic crises of 1847, 1857, and 1866, would go but a little ways towards averting panic in a period of universal suspension of gold payments on the Continent and the general adoption of the moratorium. The British government rose resolutely to the requirements of the occasion by announcing, on August 12th, that they would practically guarantee the Bank of England against loss on bills of exchange re-discounted for the joint-stock banks and the bill houses, where such documents had been accepted before August 4, 1914. The bank was able, under this authority, to make the following announcement:

"The Bank of England are prepared, on the application of the holder of any approved bill of exchange accepted before August 4, 1914, to discount at any time before its due date at Bank rate, without recourse to such holder, and upon its maturity the Bank of England will, in order to assist the resumption of normal business operations, give the acceptor the opportunity until further notice of postponing payment, interest being payable in the meantime at 2 per cent over Bank rate varying. Arrangements will be made to carry this scheme into effect so as to preserve all existing obligations.

"The Bank of England will be prepared for this purpose to approve such bills of exchange as are customarily discounted by them and also good trade bills and the acceptances

of such foreign and Colonial firms and bank agencies as are established in Great Britain."

The result of this policy was a flood of demands upon the Bank of England, which for several days exhausted its clerical force and compelled it to suspend re-discounts at an early hour in the day. On July 30th, the "other securities" held by the bank, which represented commercial paper and other collateral held, apart from government obligations, stood at the comparatively normal point of £47,307,000 ($230,625,000). This amount was increased during the following week to £65,351,000; in the next week to £70,786,000; in the week of August 20th, after the government guarantee was announced, to £94,726,000; and in the week of August 27th, to £109,904,000 ($535,800,000). The pressure upon the banking reserve was such that the proportion usually maintained,—40 per cent. or more in notes against deposits,—fell in the week of August 7th to 14.60 per cent. During the next three weeks gold arrived in considerable amounts from South Africa, America, and other sources, and increased the bullion holdings of the bank from a minimum of £27,622,000 ($134,650,000) on August 7th, to £33,014,000 on August 13th, £37,959,000 on August 20th, and £43,473,000 ($211,950,000) on August 27th.

Thus, within three weeks, the gold resources of the bank were increased by nearly $80,000,000; but even these great gains in the yellow metal raised the banking reserve against deposits to only 17.20 per cent. on August 13th, and it was several weeks before this ratio was materially exceeded. Ultimately, however, the ratio increased to 24.51 per cent. on October 8th, and continued to rise, with the increase in the gold stock and in the liquidation of maturing loans. The bank was able to reduce its discount rate on August 13th to 5 per cent., and the restoration of confidence, coupled with the cessation of stock-exchange business, enabled the joint-stock banks to offer money by the middle of September as low as $2\frac{3}{4}$ per cent.

The joint-stock banks, which were naturally timid about re-discounting acceptances payable by foreigners, in view of the general moratorium, followed the same policy which they had pursued in earlier crises, of carrying the proceeds of their borrowing from the bank to the credit of their deposit accounts, in order to increase their available cash resources and improve the appearance of their balance sheets.[1] As a result, the item of "other deposits," apart from those of the government, increased from £54,418,000 on July 30th, to £146,646,000 ($714,900,000) on October 8th. From this time set in a tendency to decline in such deposits, which indicated that the severity of the tension was over and that the joint-stock banks were beginning to take care of their clients from their own resources.

In Germany and France similar support was given by the central bank to the joint-stock banks and to mercantile credit. In Germany the item of discounts at the Imperial Bank, which stood on July 15th at 807,651,000 marks ($192,000,000) had risen on September 23d to 3,889,200,000 marks ($925,000,000). This great volume of re-discounts was met chiefly by the issue of notes, which increased from 1,890,893,000 marks ($448,250,000) outstanding on July 24th to 4,382,902,000 marks ($1,041,500,000) on October 12th. A part of this issue of paper was offset by the absorption of the floating gold stock into the vaults of the bank. The war fund which had been held by the government in the Castle of Spandau was turned over to the Imperial Bank to the amount of about $50,000,000, and gold coin in circulation was gathered up under appeals by the press to patriotic spirit, until the total holdings of gold, which had been 1,356,540,000 marks ($322,500,000) on July 25th, rose to 1,754,800,000 marks ($417,000,000) on October 12th. While the policy of specie suspension adopted by the bank sent the quotation for marks in New York nearly 10 per cent. below gold parity, the free

[1] *Vide supra*, page 131.

extension of credit to domestic borrowers prevented the adoption of a general moratorium and encouraged subscriptions to the war loans, which were facilitated by advances upon a variety of securities which would not have been accepted under normal conditions. At the Bank of France, during a single week, discounts at Paris alone rose from 543,511,070 francs ($105,000,000) on July 23d to 1,364,338,582 francs ($263,600,000) on July 30th. Publication of the weekly reports was then suspended and the further great volume of discounts for the support of French finance was not officially made known.

In these and other countries, the power of re-discount proved an effective weapon for meeting the immediate needs of the mercantile community and averting panic. In England the moratorium came to an end almost unnoticed on November 4th; loans by the Bank of England fell from a maximum of £149,843,000 on September 3d to £122,108,000 on November 5th; and plans were making in both London and New York for the early opening of the stock exchanges.

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